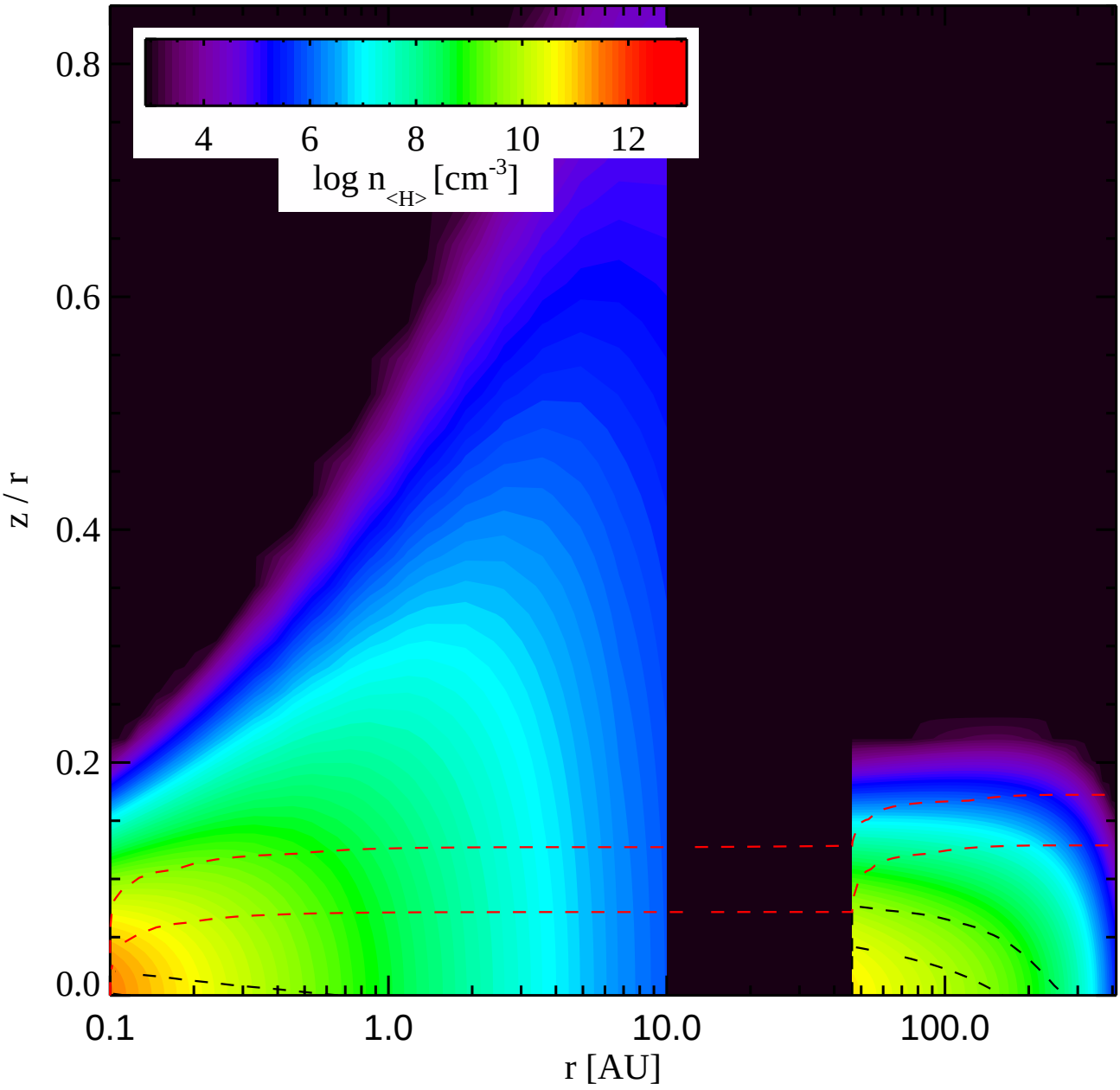
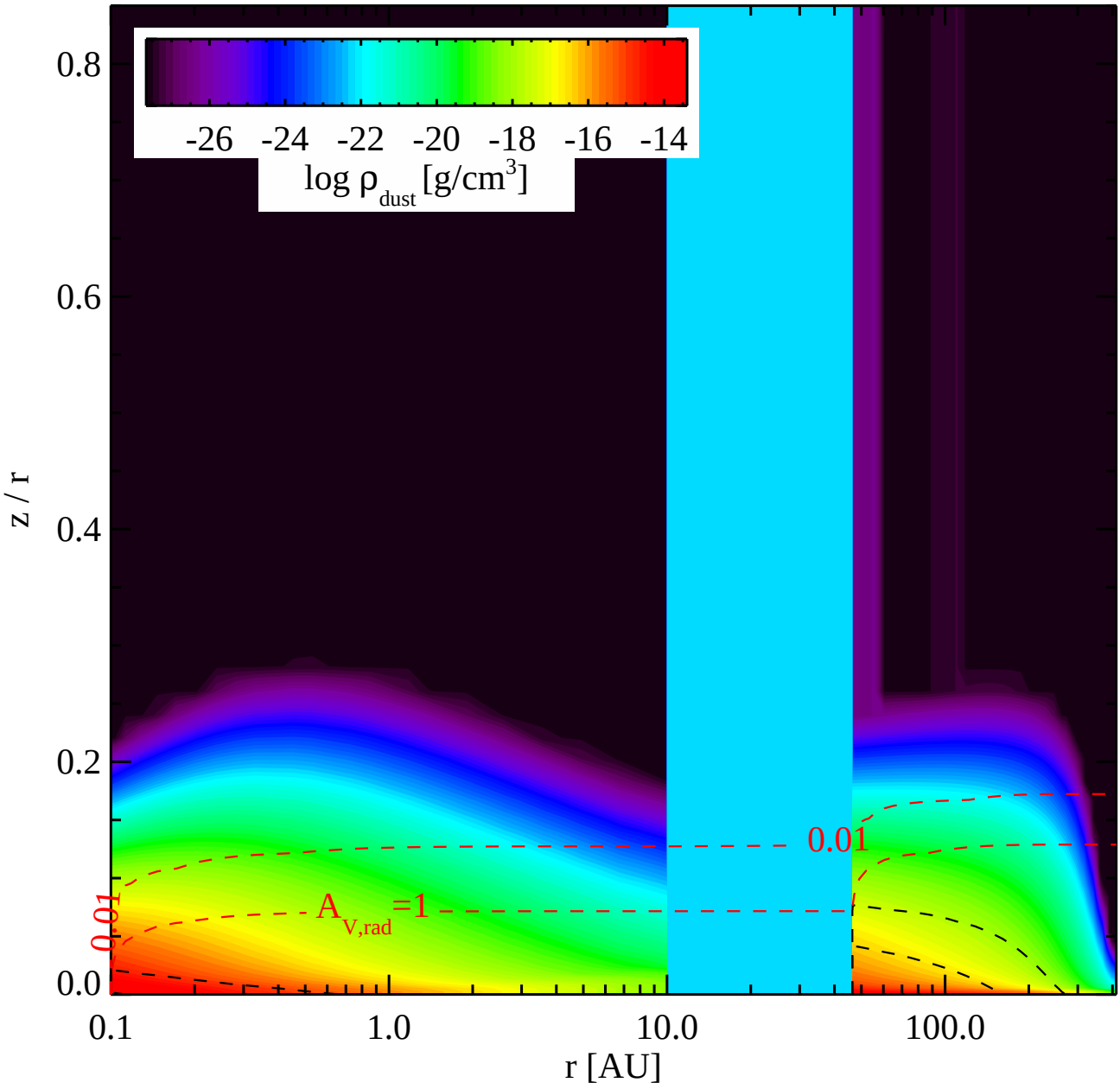
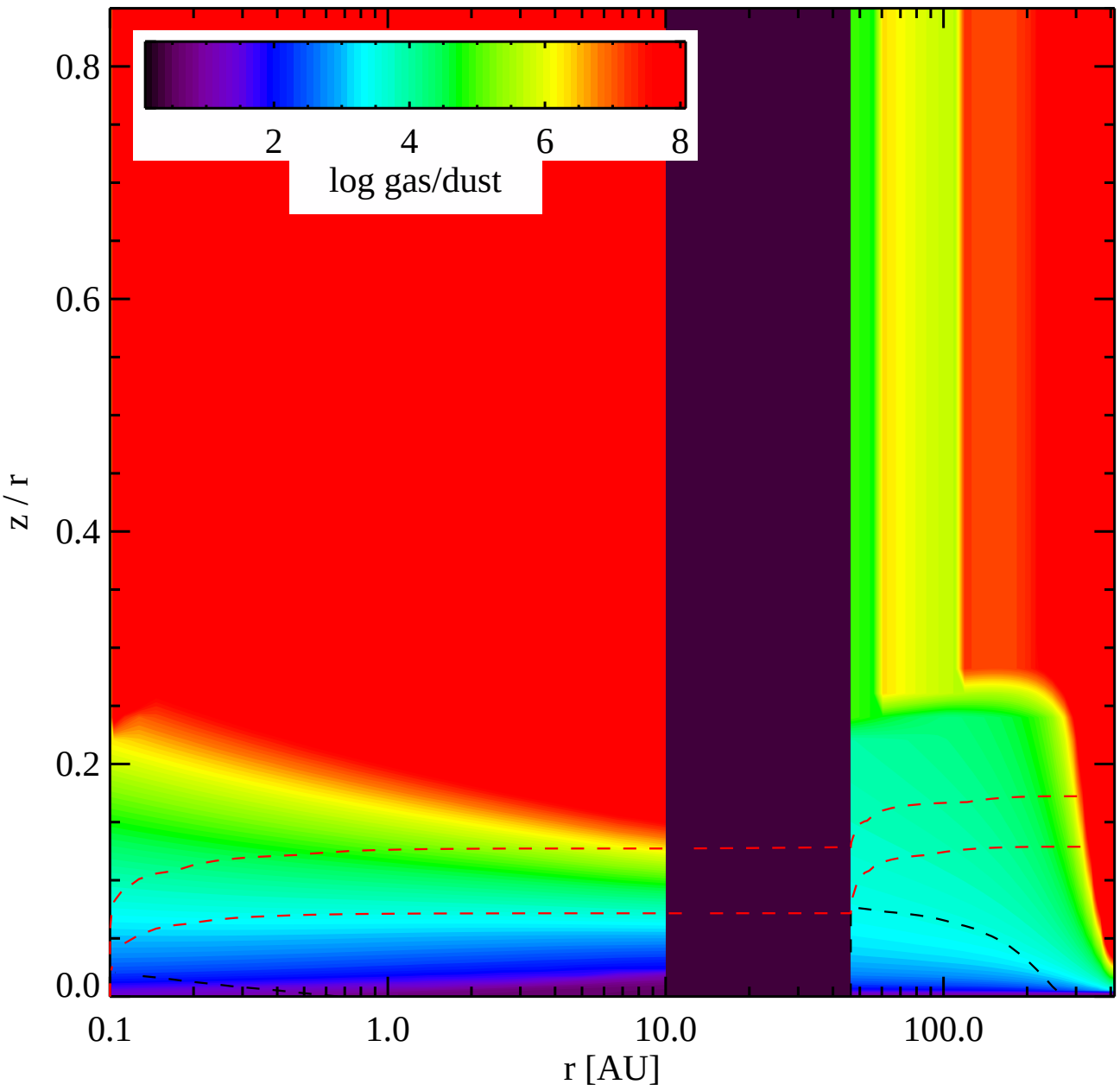
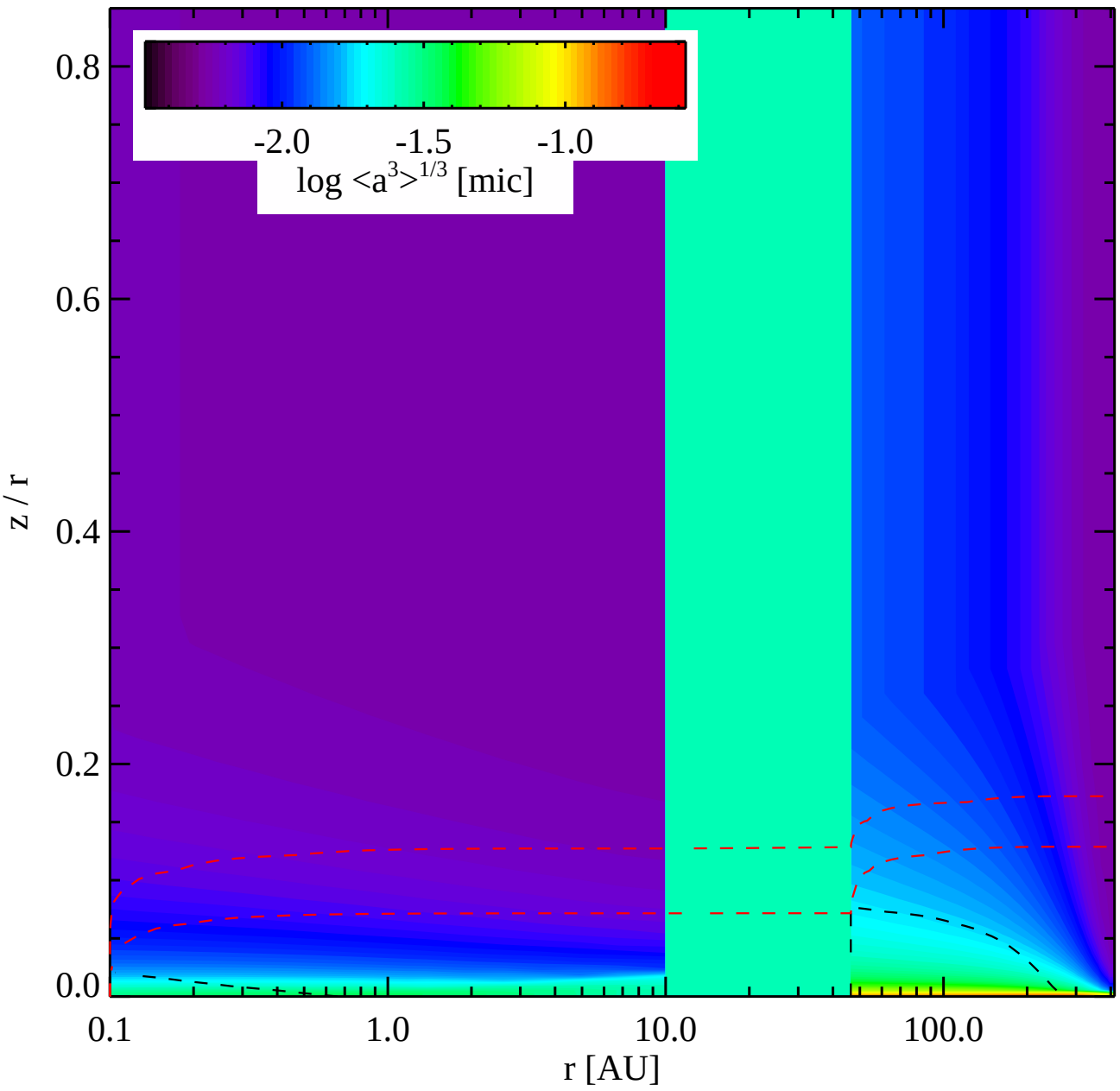
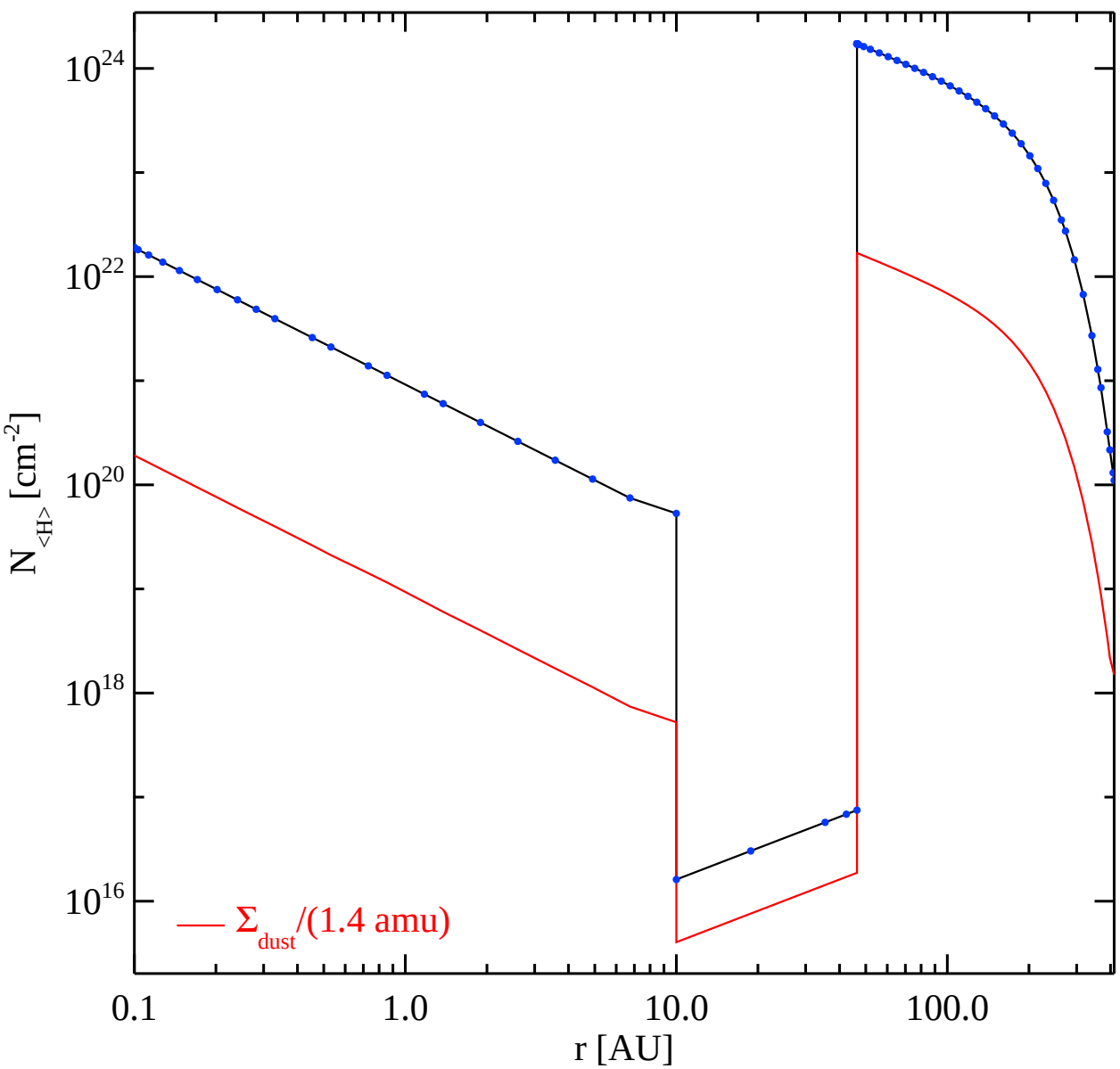
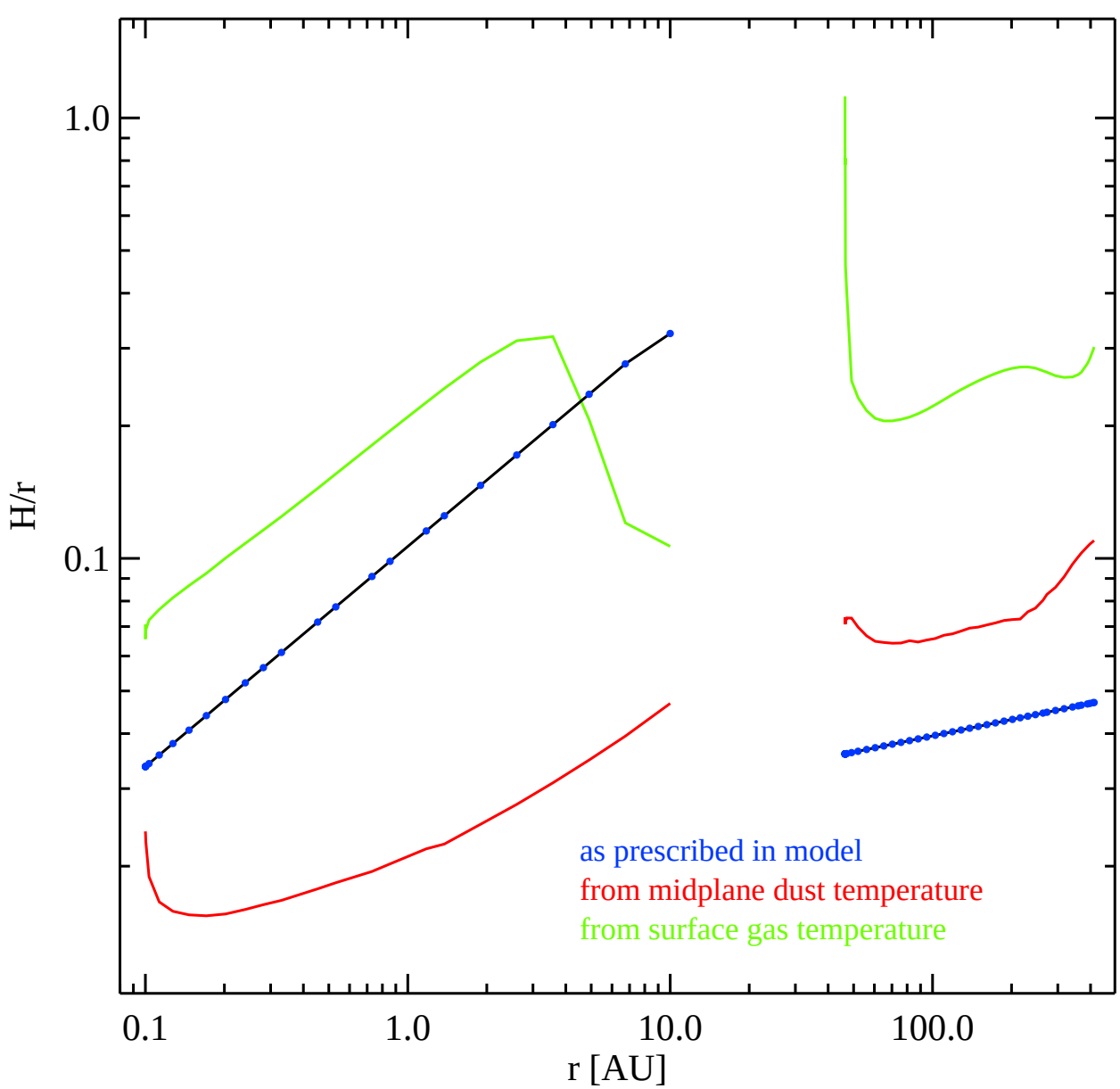

4
6
8
10
12
log n<H> [cm-3]
0.8
0.6
0.4
0.2
0.0
z / r
0.1
1.0
10.0
100.0
r [AU]

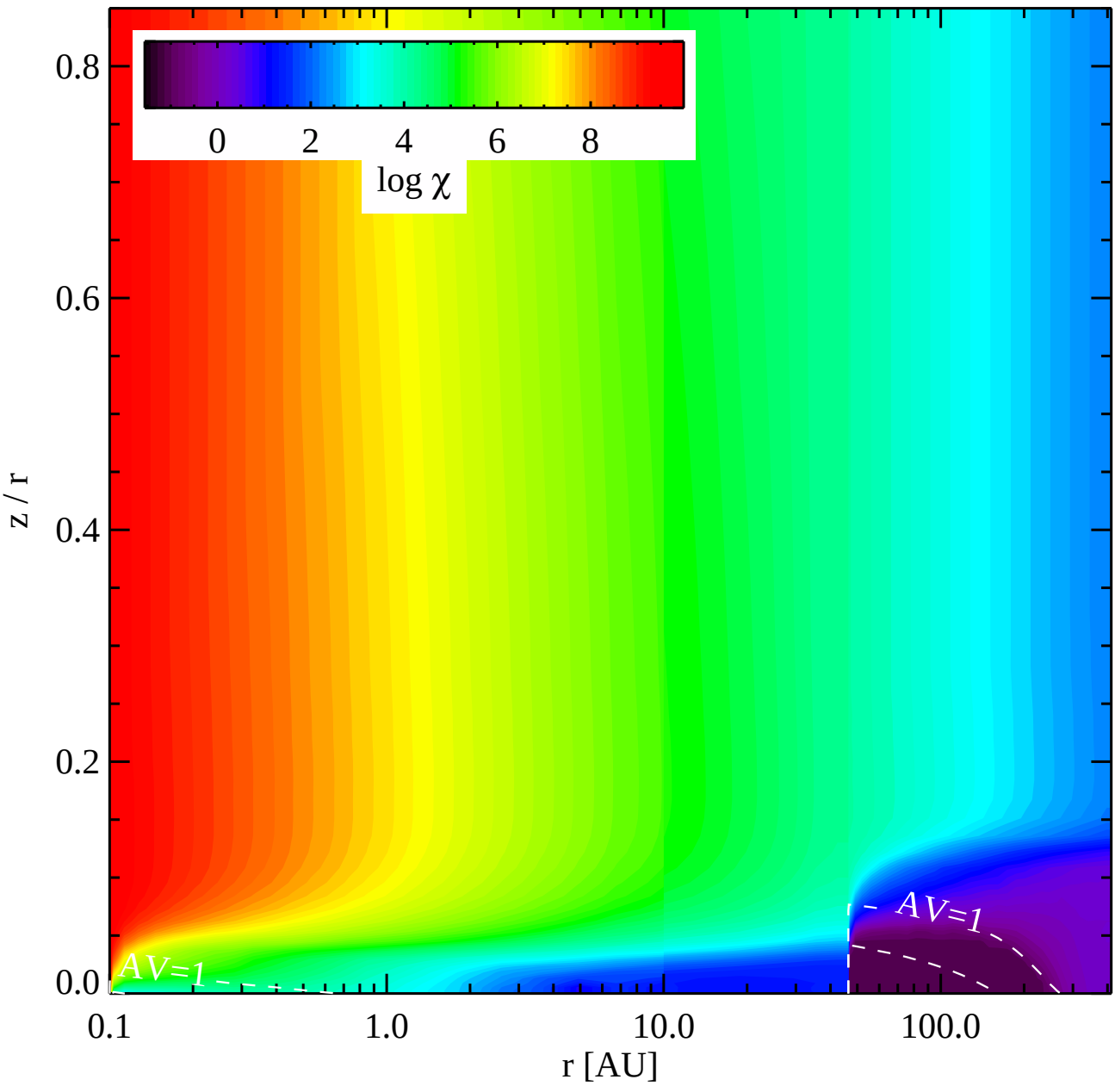

-26 -24 -22 -20 -18 -16 -14
log ρ dust [g/cm3]
0.8
0.6
0.4
0.2
0.0
z / r
0.1
1.0
10.0
100.0
r [AU]
0.01
0.01
AV,rad =1

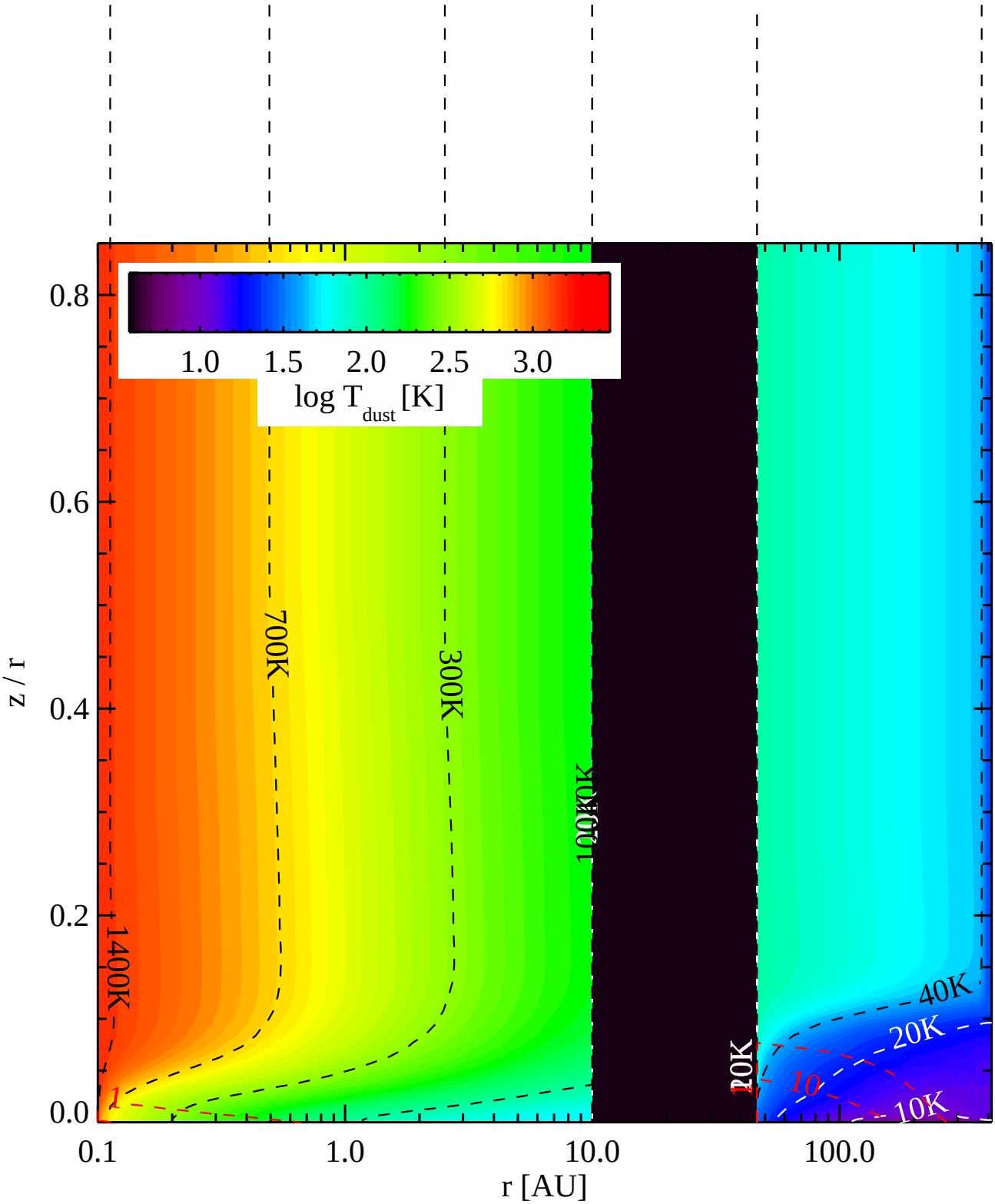

2
4
6
8
log gas/dust
0.8
0.6
0.4
0.2
0.0
z / r
0.1
1.0
10.0
100.0
r [AU]

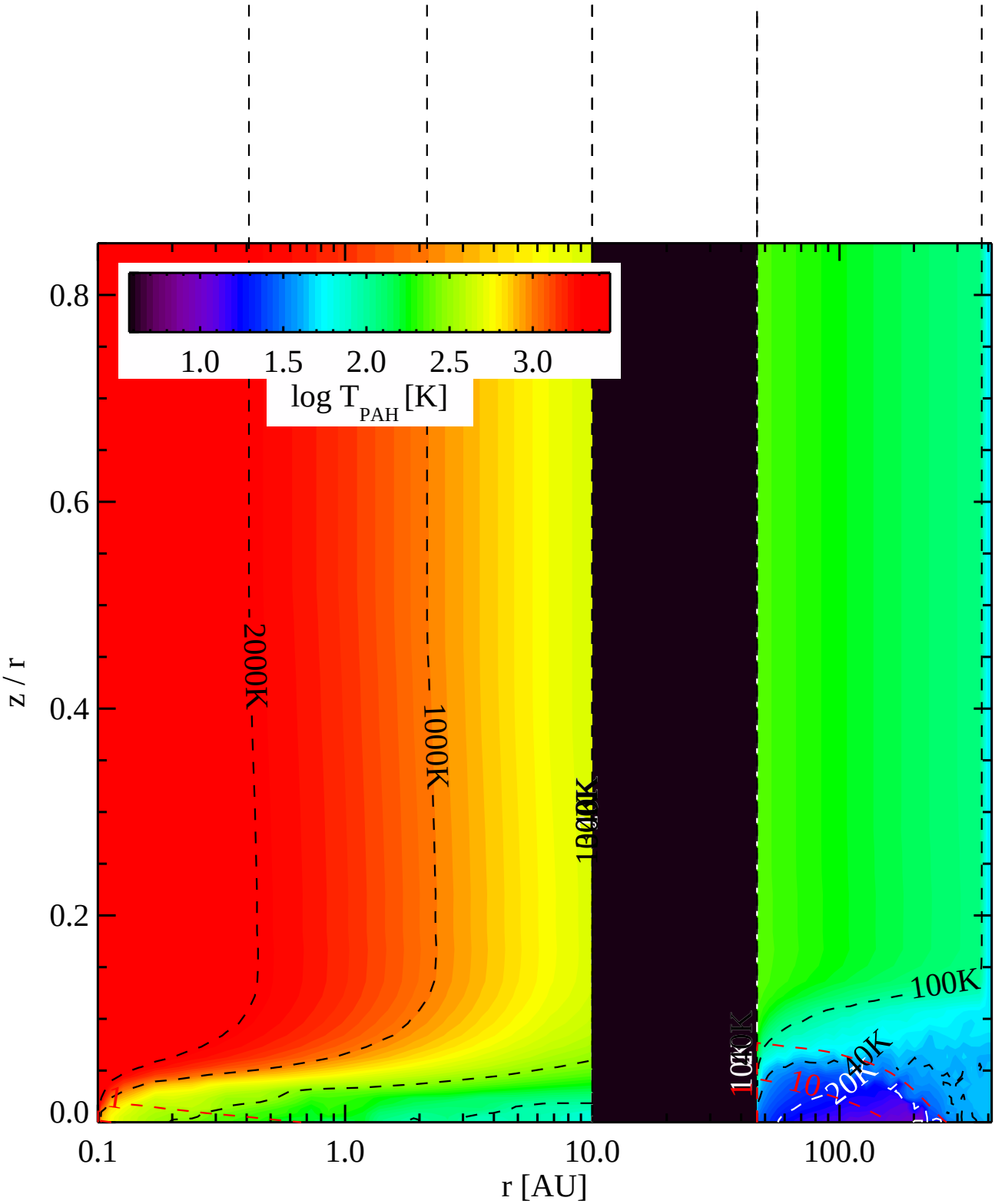

-2.0
-1.5
-1.0
log <a^3>^1/3 [mic]
0.8
0.6
0.4
0.2
0.0
z / r
0.1
1.0
10.0
100.0
r [AU]

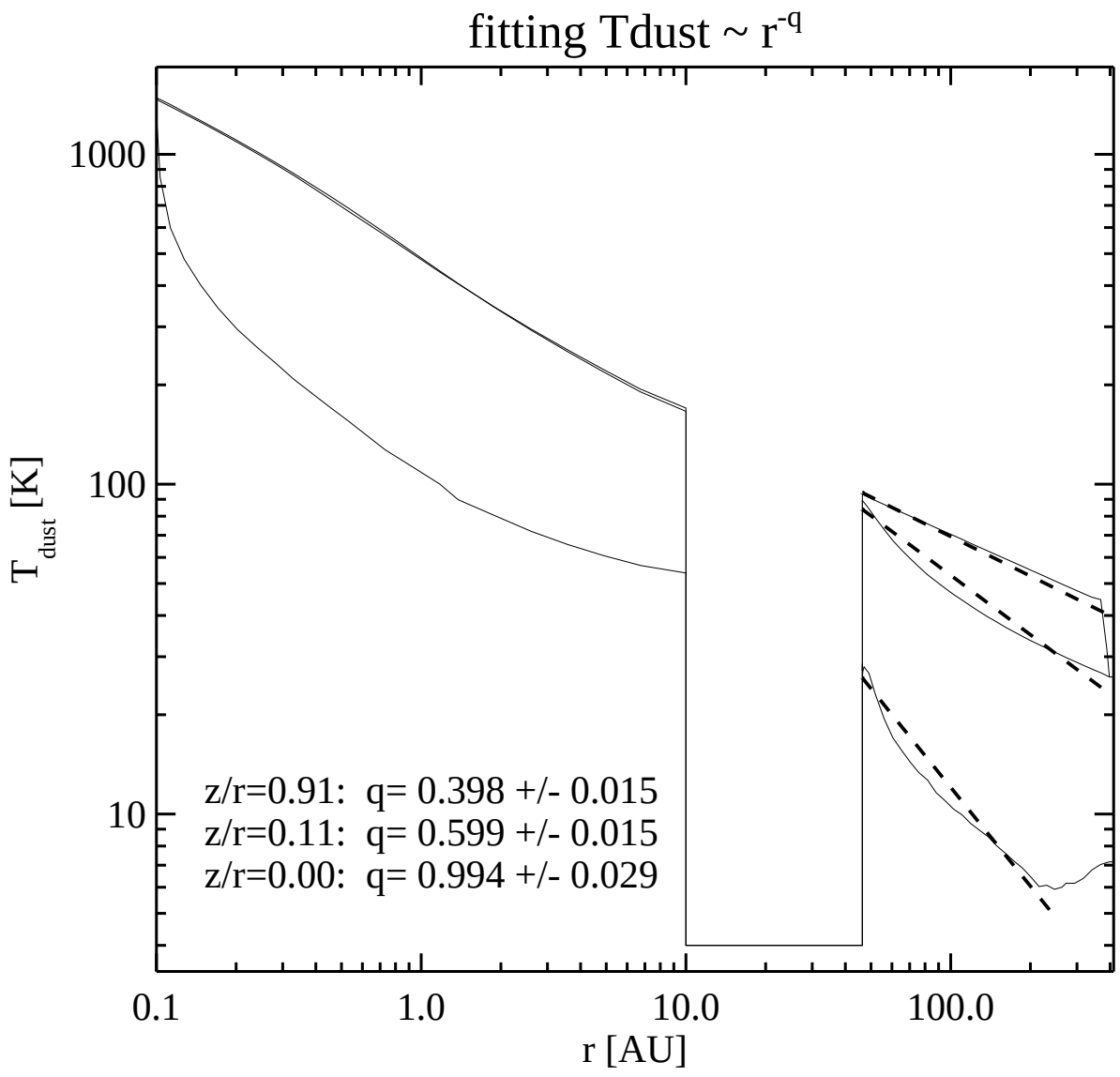

10^{24}
10^{22}
10^{20}
10^{18}
10^{16}
$N_{<H>}$ [cm^{-2}]
— Σ_{dust}/(1.4 amu)
0.1
1.0
10.0
100.0
r [AU]

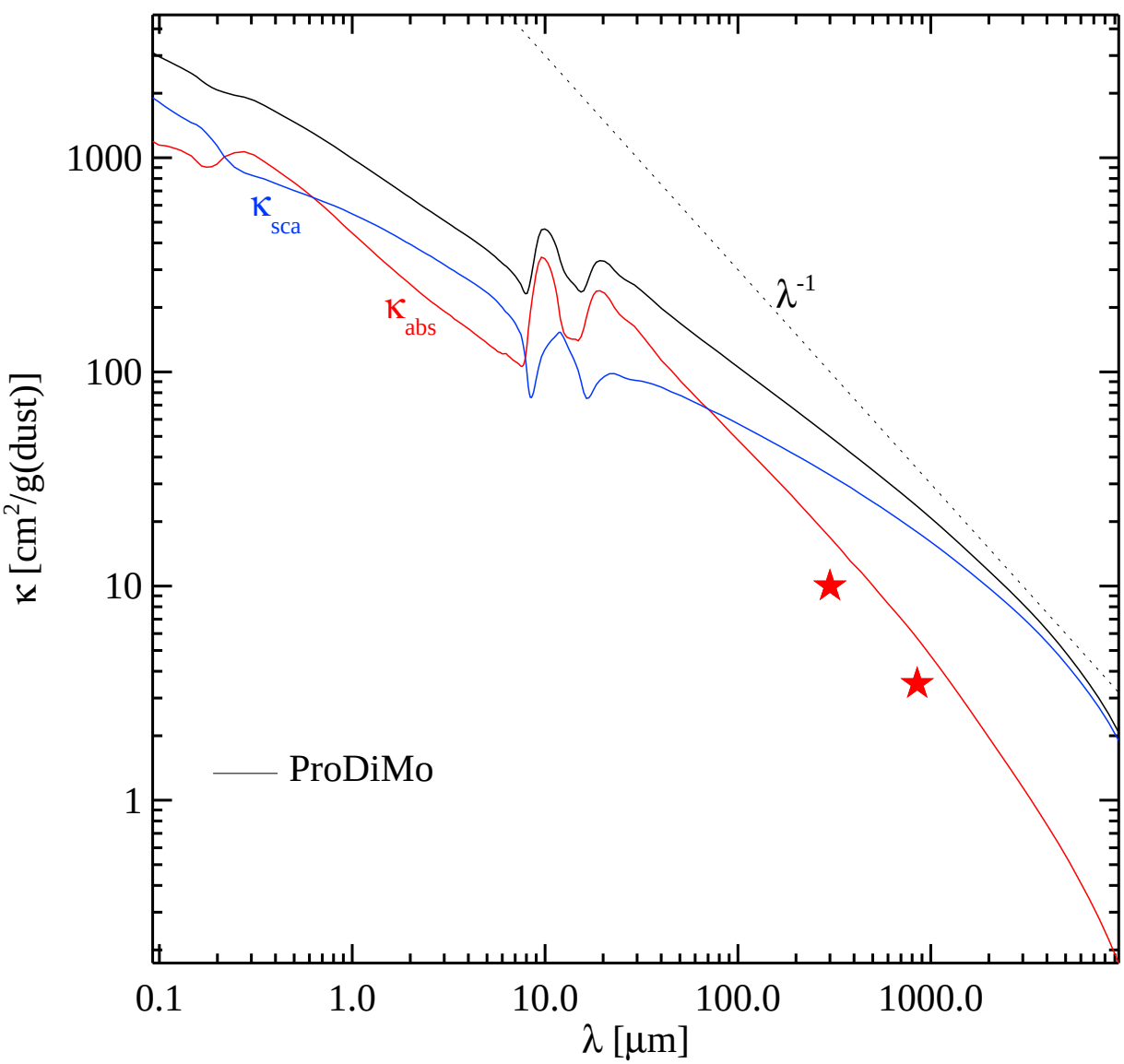

1.0
0.1
H/r
0.1
1.0
10.0
100.0
r [AU]
as prescribed in model
from midplane dust temperature
from surface gas temperature

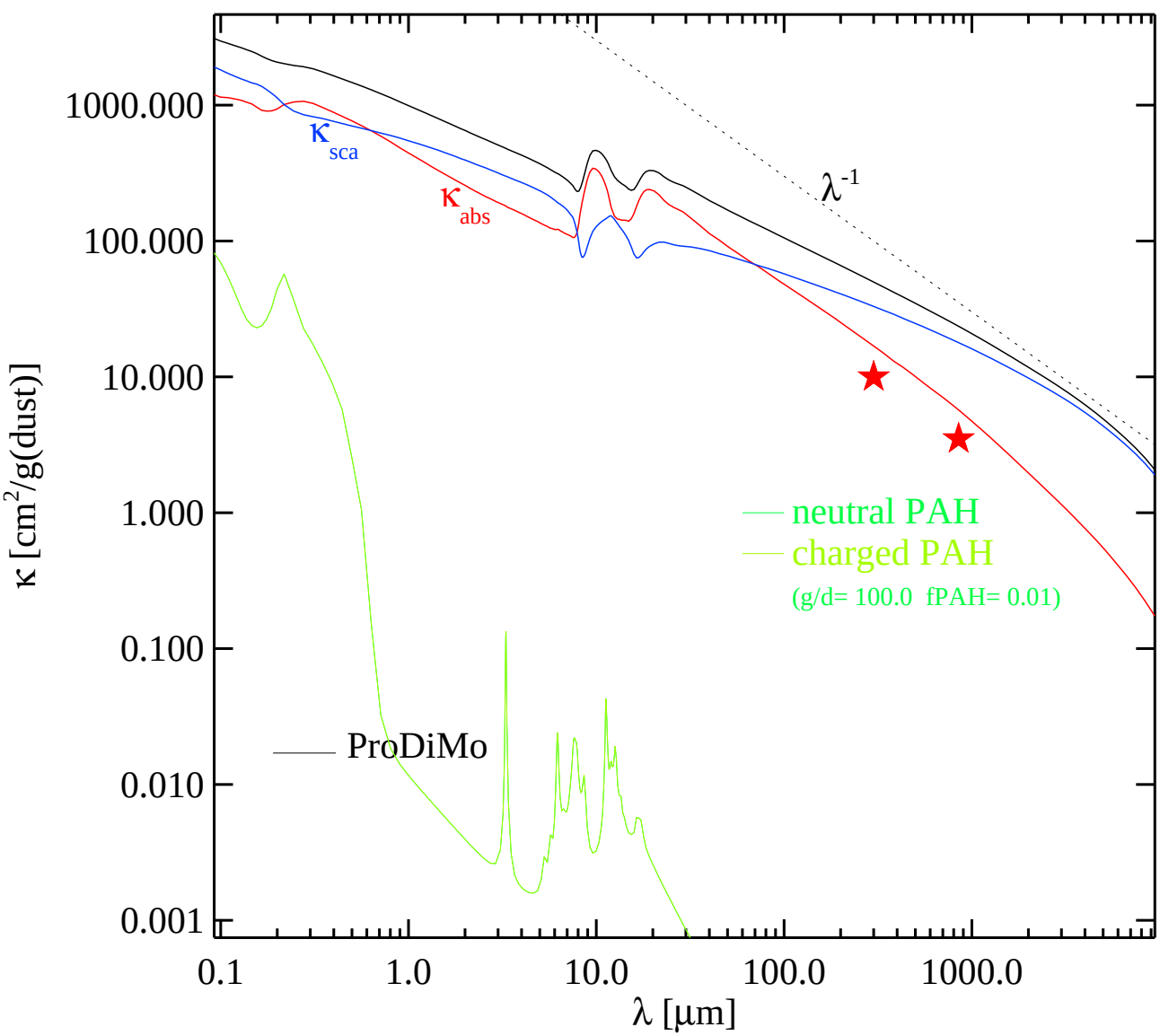

0.8
0.6
0.4
0.2
0.0
z / r
0.1
1.0
10.0
100.0
r [AU]
0
2
4
6
8
log χ
AV=1
AV=1

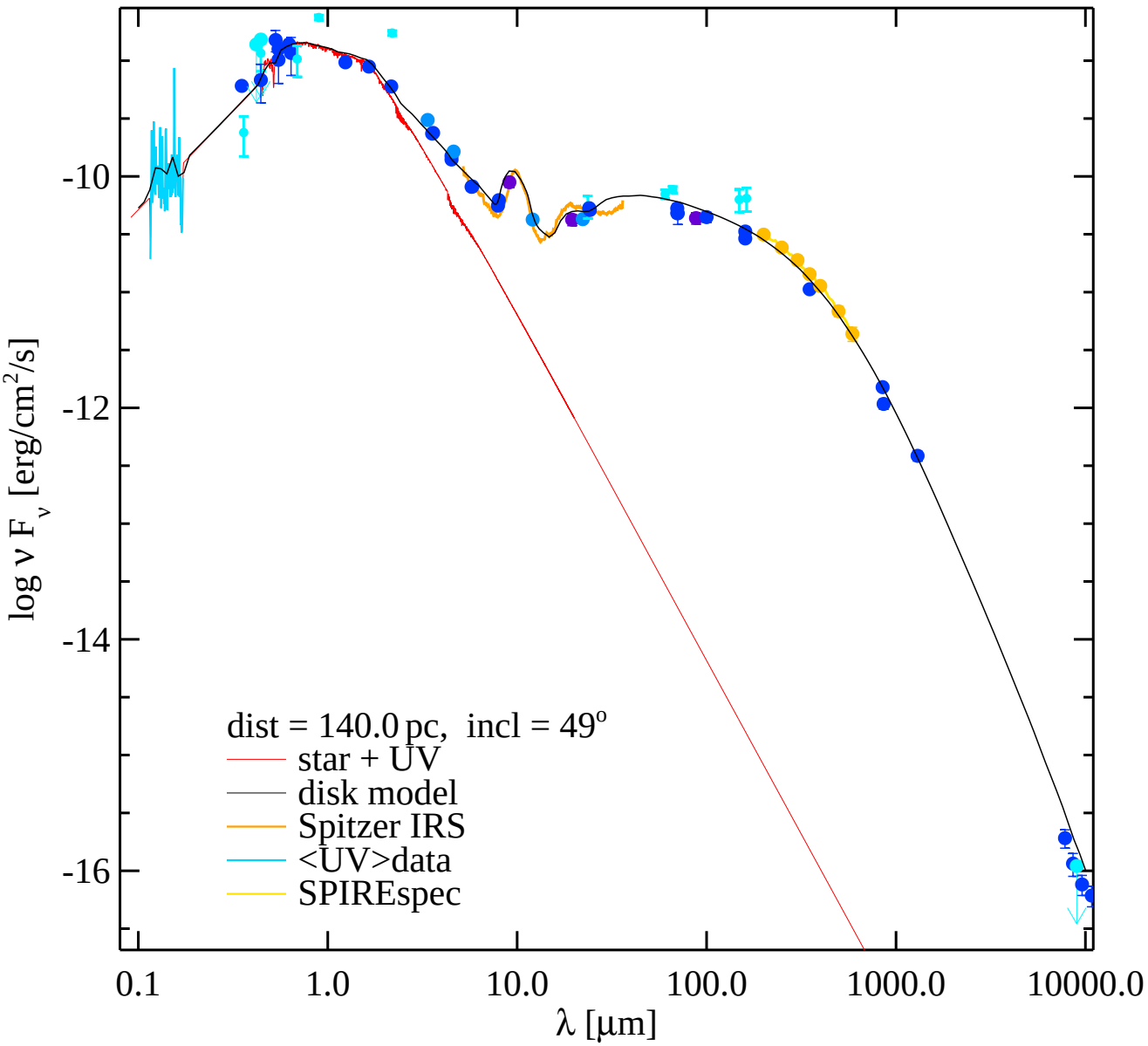

1.0
1.5
2.0
2.5
3.0
log T dust [K]
0.8
0.6
0.4
0.2
0.0
z / r
0.1
1.0
10.0
100.0
r [AU]
1400K
700K
300K
100K
40K
20K
10K
1
10

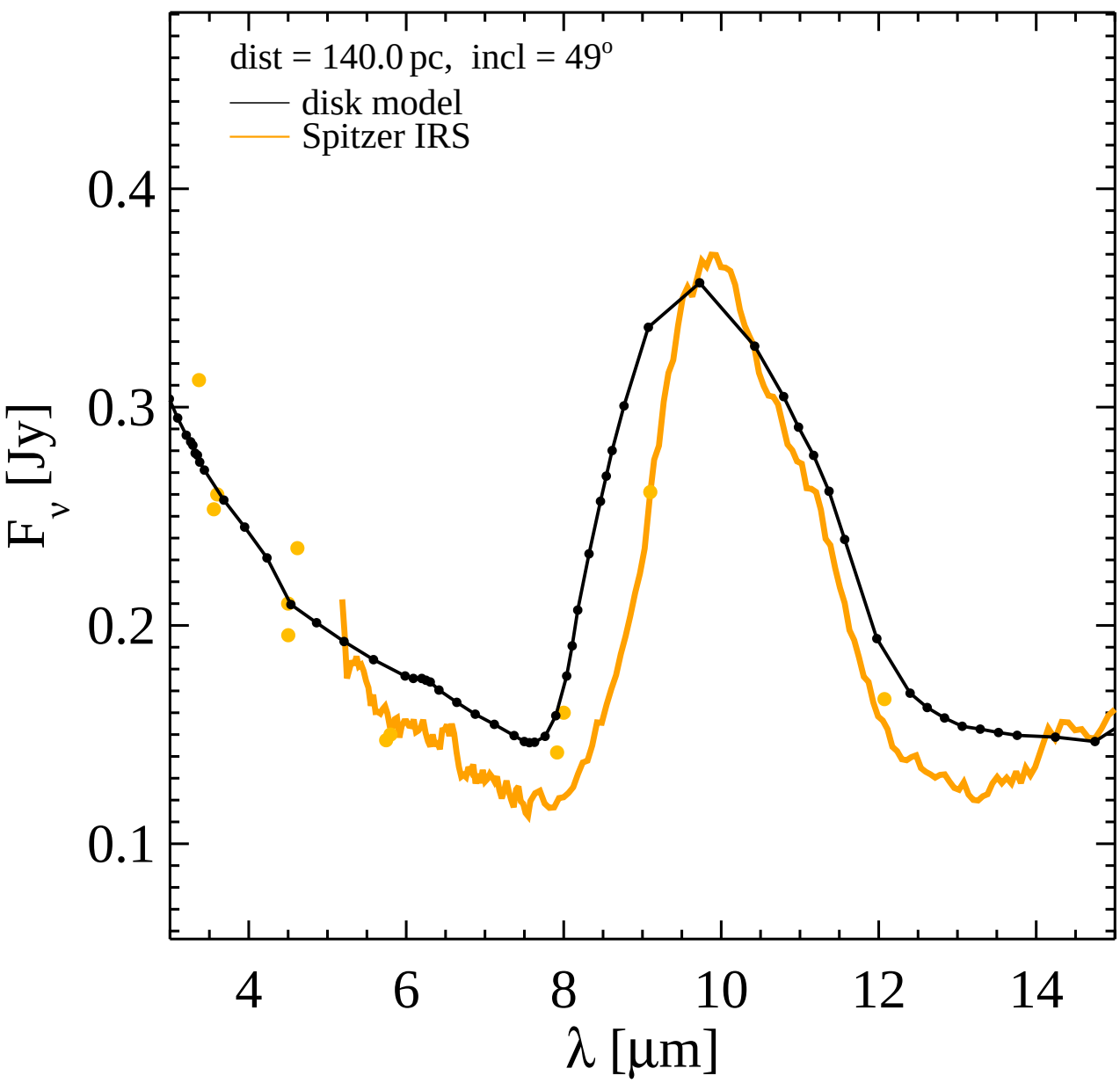

1.0
1.5
2.0
2.5
3.0
log T PAH [K]
0.8
0.6
0.4
0.2
0.0
z / r
0.1
1.0
10.0
100.0
r [AU]
200K
1000K
100K
40K
20K
10
1

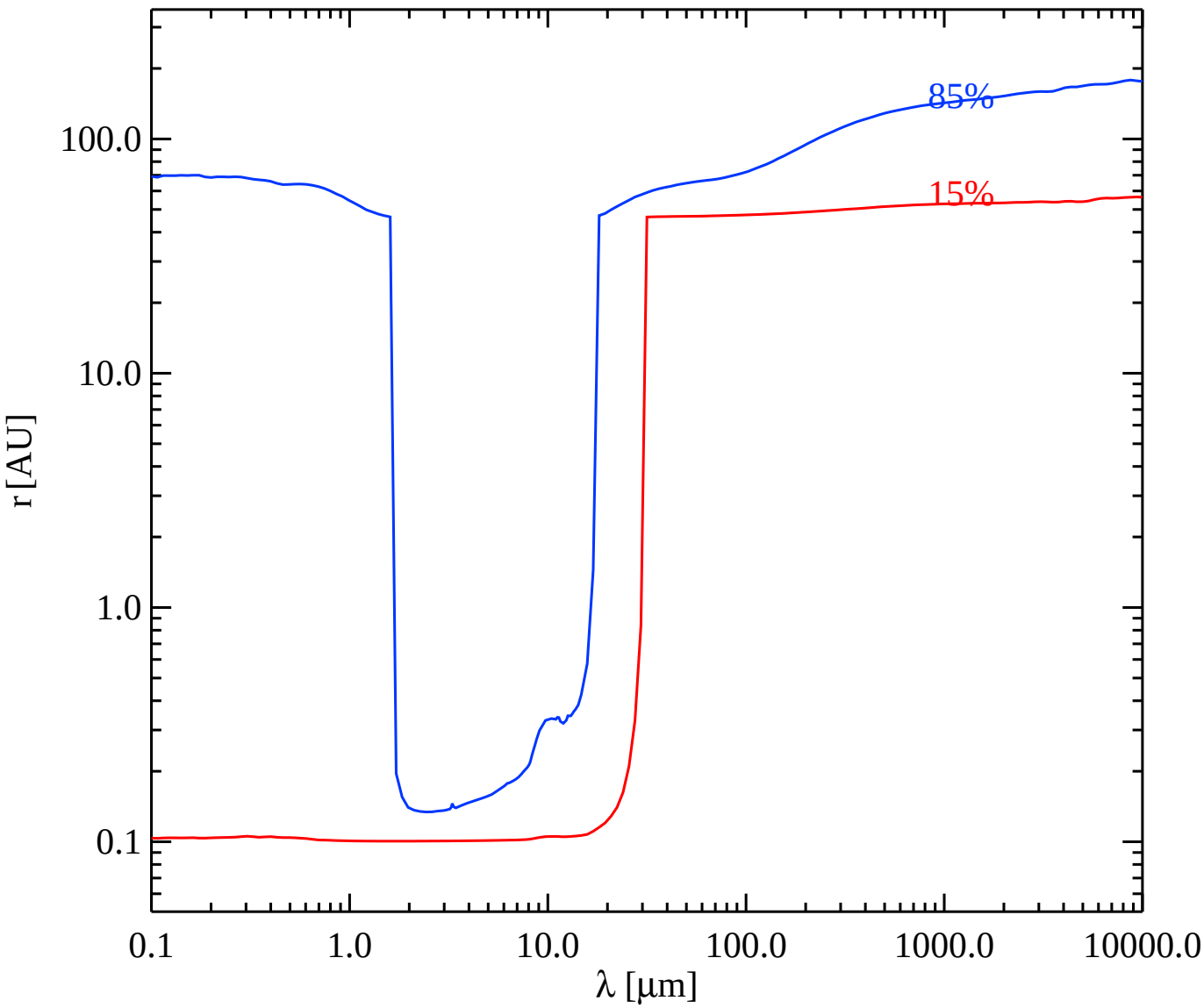

fitting Tdust ~ r^-q
1000
100
10
T_dust [K]
0.1
1.0
10.0
100.0
r [AU]
z/r=0.91: q= 0.398 +/- 0.015
z/r=0.11: q= 0.599 +/- 0.015
z/r=0.00: q= 0.994 +/- 0.029

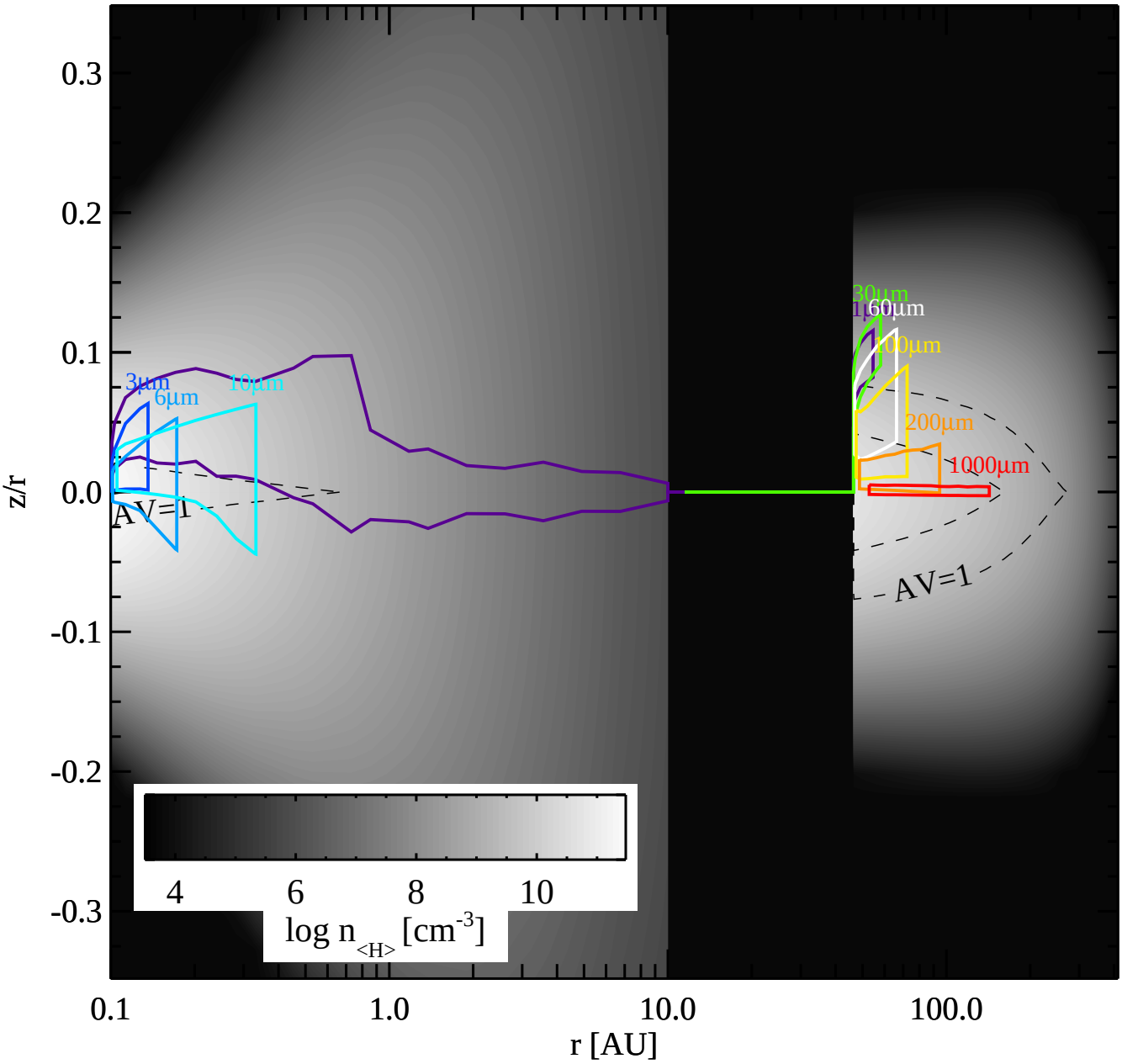

1000
100
10
1
κ [cm²/g(dust)]
κsca
κabs
λ-1
ProDiMo
0.1
1.0
10.0
100.0
1000.0
λ [μm]

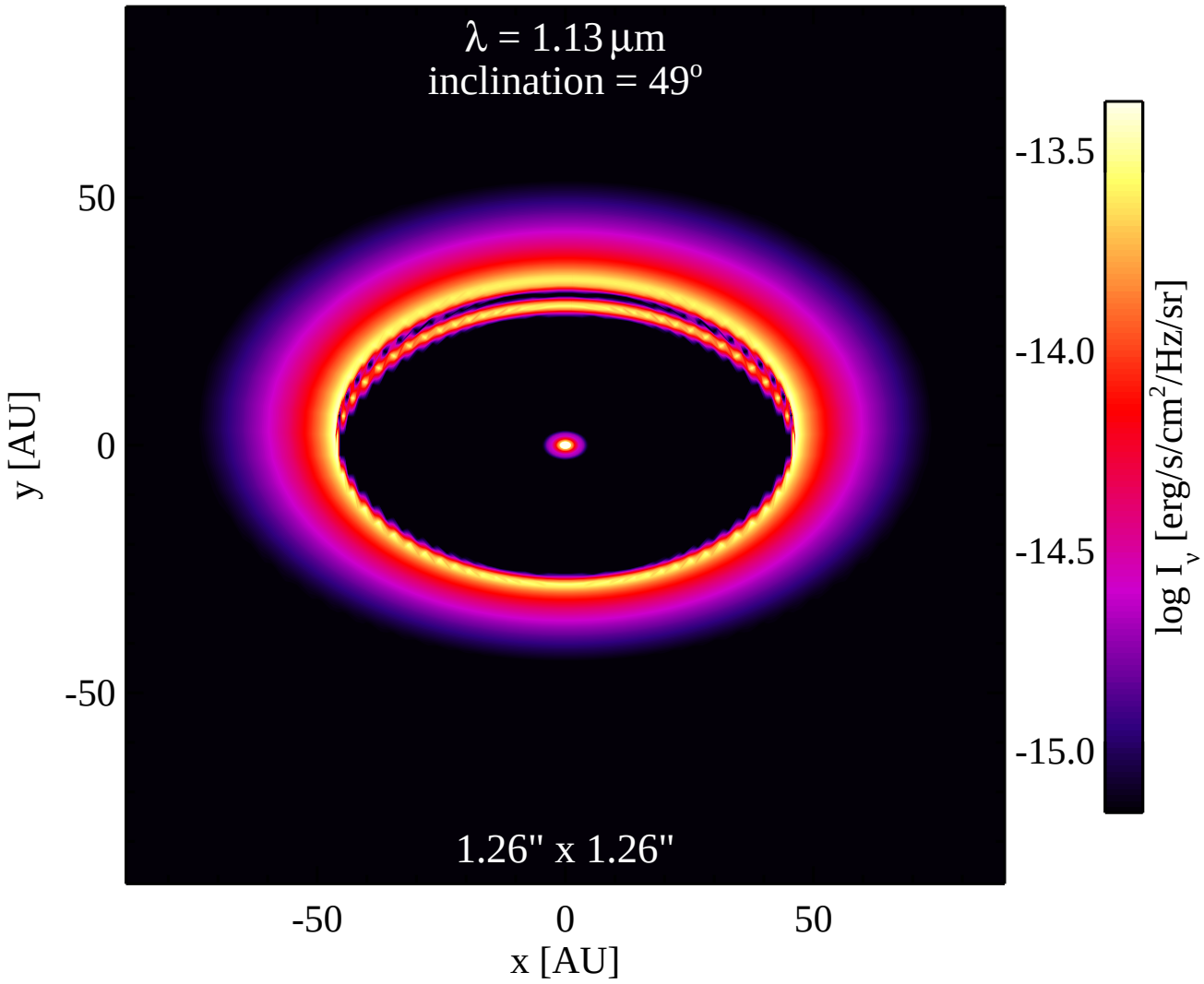

1000.000
100.000
10.000
1.000
0.100
0.010
0.001
κ [cm²/g(dust)]
0.1
1.0
10.0
100.0
1000.0
λ [μm]
κsca
κabs
λ-1
neutral PAH
charged PAH
(g/d= 100.0 fPAH= 0.01)
ProDiMo

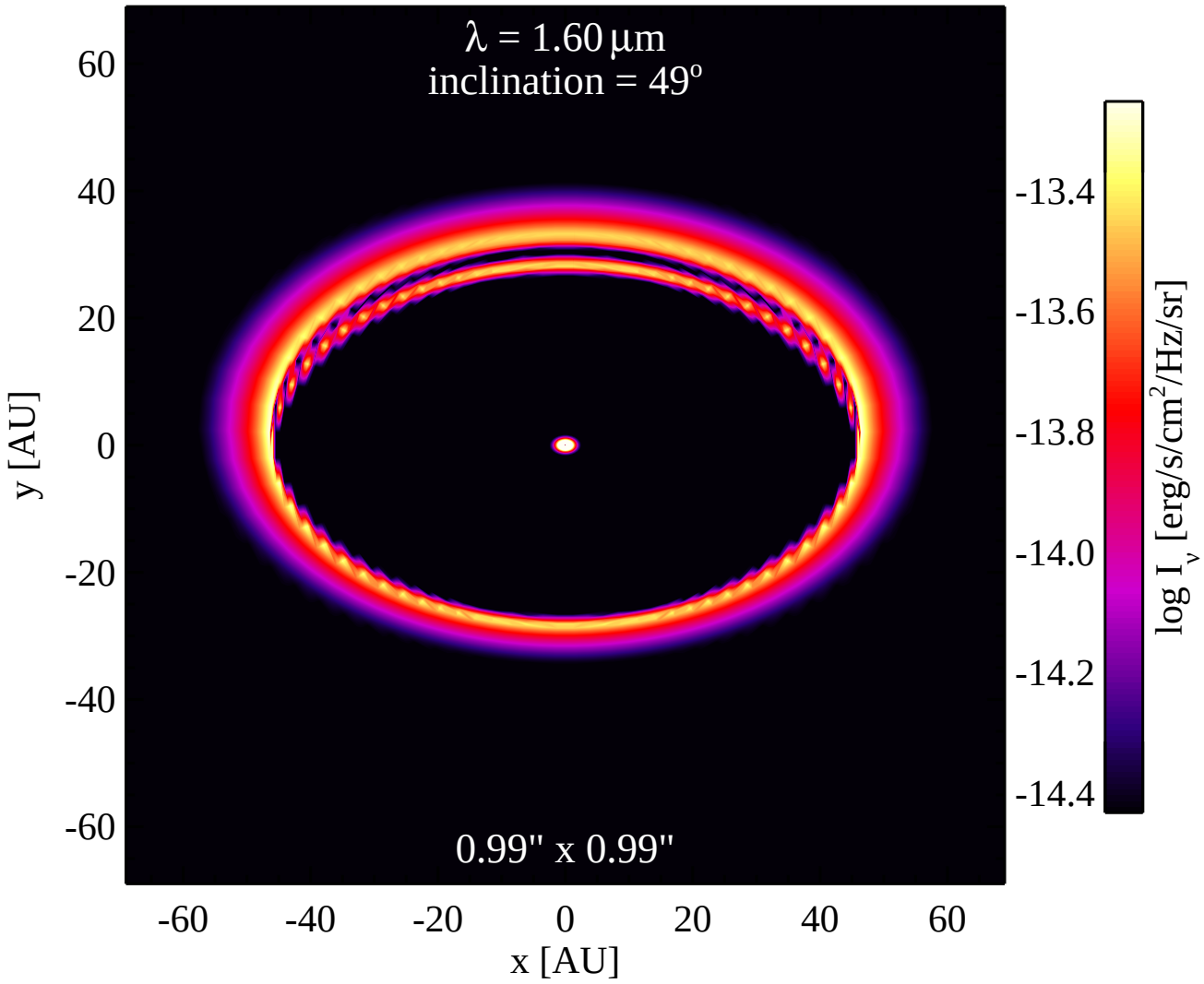

-10
-12
-14
-16
log ν F_ν [erg/cm²/s]
0.1
1.0
10.0
100.0
1000.0
10000.0
λ [μm]
dist = 140.0 pc, incl = 49°
star + UV
disk model
Spitzer IRS
<UV>data
SPIREspec

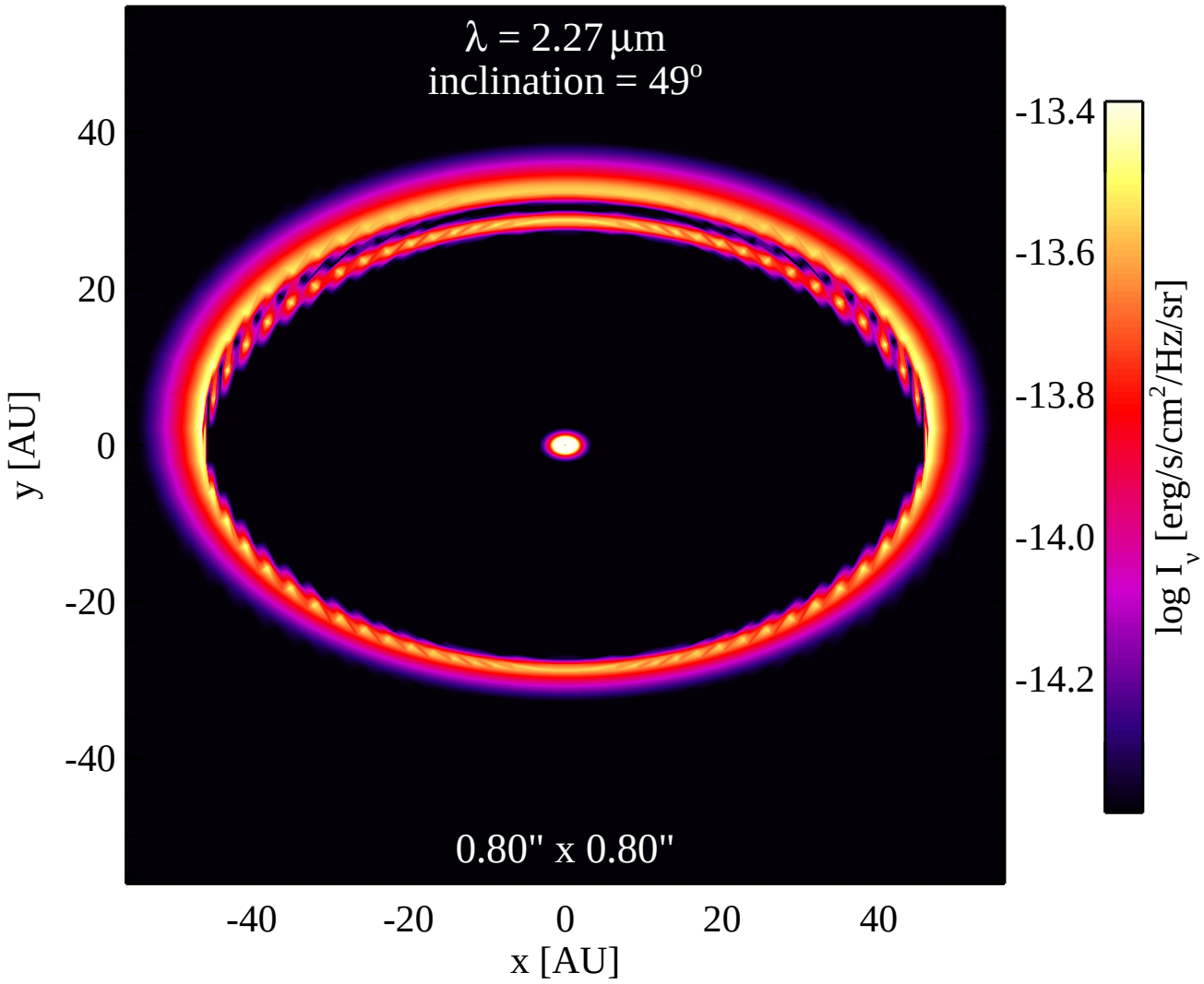

dist = 140.0 pc, incl = 49°
disk model
Spitzer IRS
0.4
0.3
0.2
0.1
F_ν [Jy]
4
6
8
10
12
14
λ [μm]

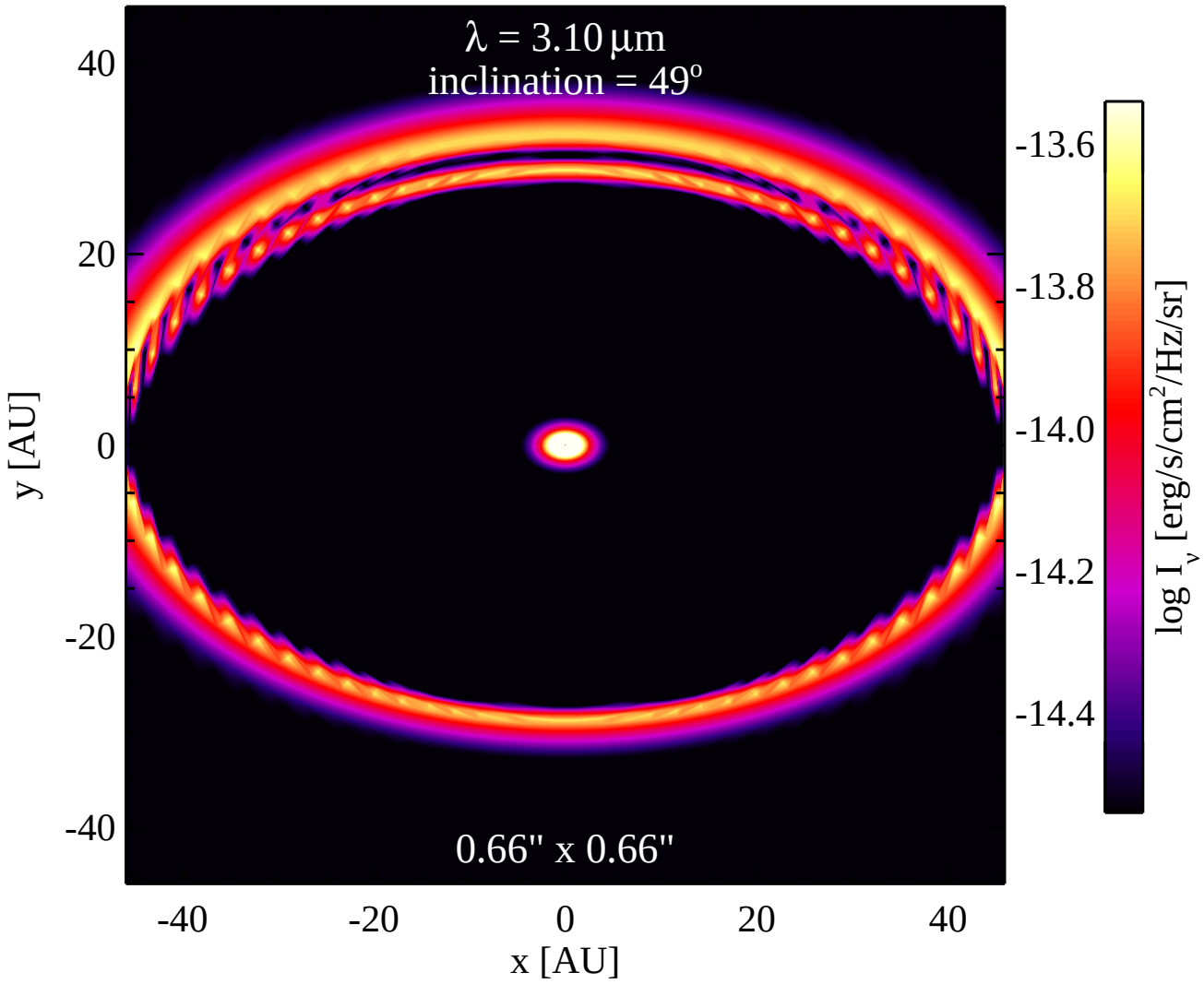

85%
15%
100.0
10.0
1.0
0.1
r [AU]
0.1
1.0
10.0
100.0
1000.0
10000.0
λ [μm]

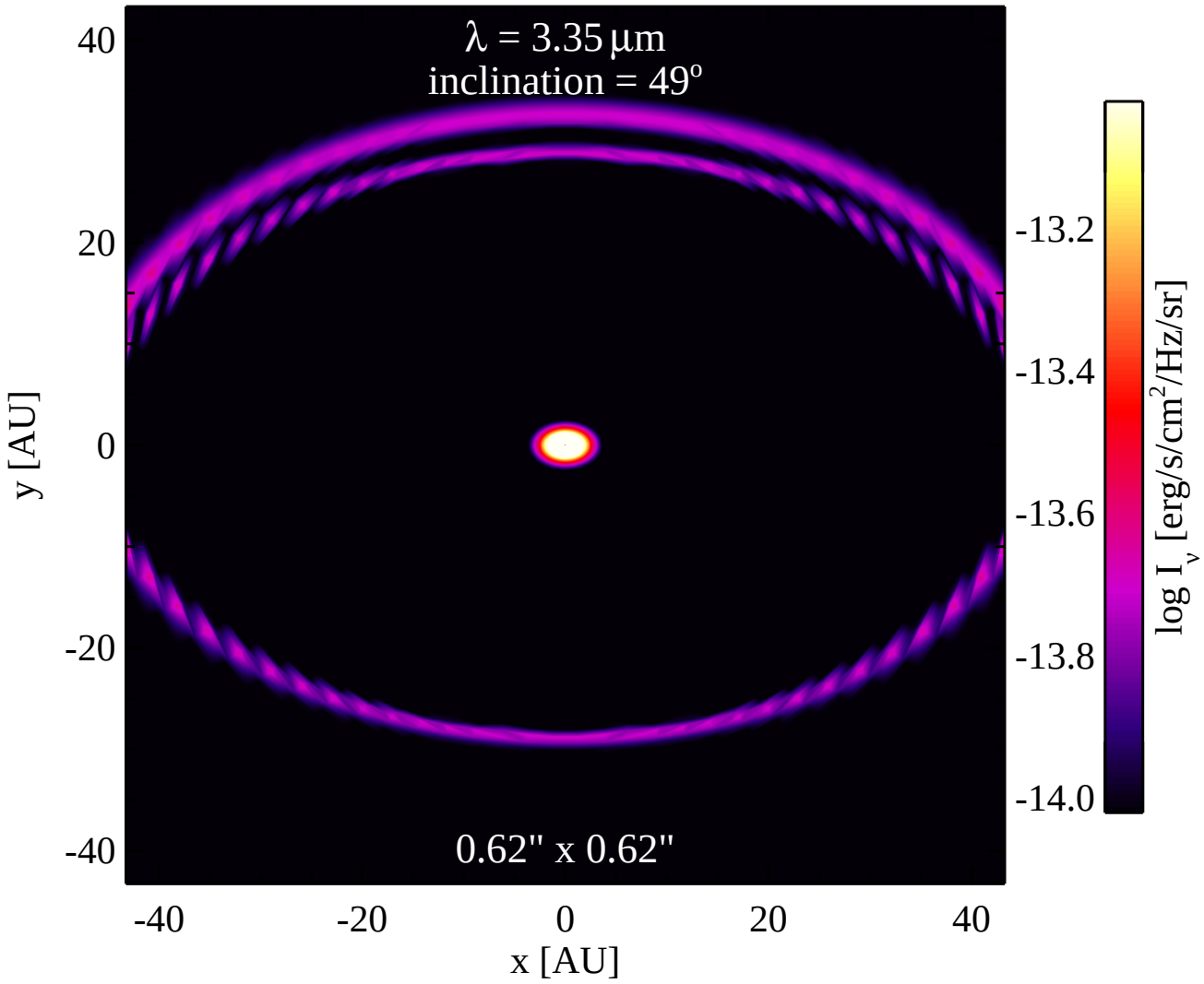

0.3
0.2
0.1
0.0
-0.1
-0.2
-0.3
z/r
3µm
6µm
10µm
AV=1
30µm
60µm
100µm
200µm
1000µm
AV=1
4
6
8
10
log n<H> [cm-3]
0.1
1.0
10.0
100.0
r [AU]

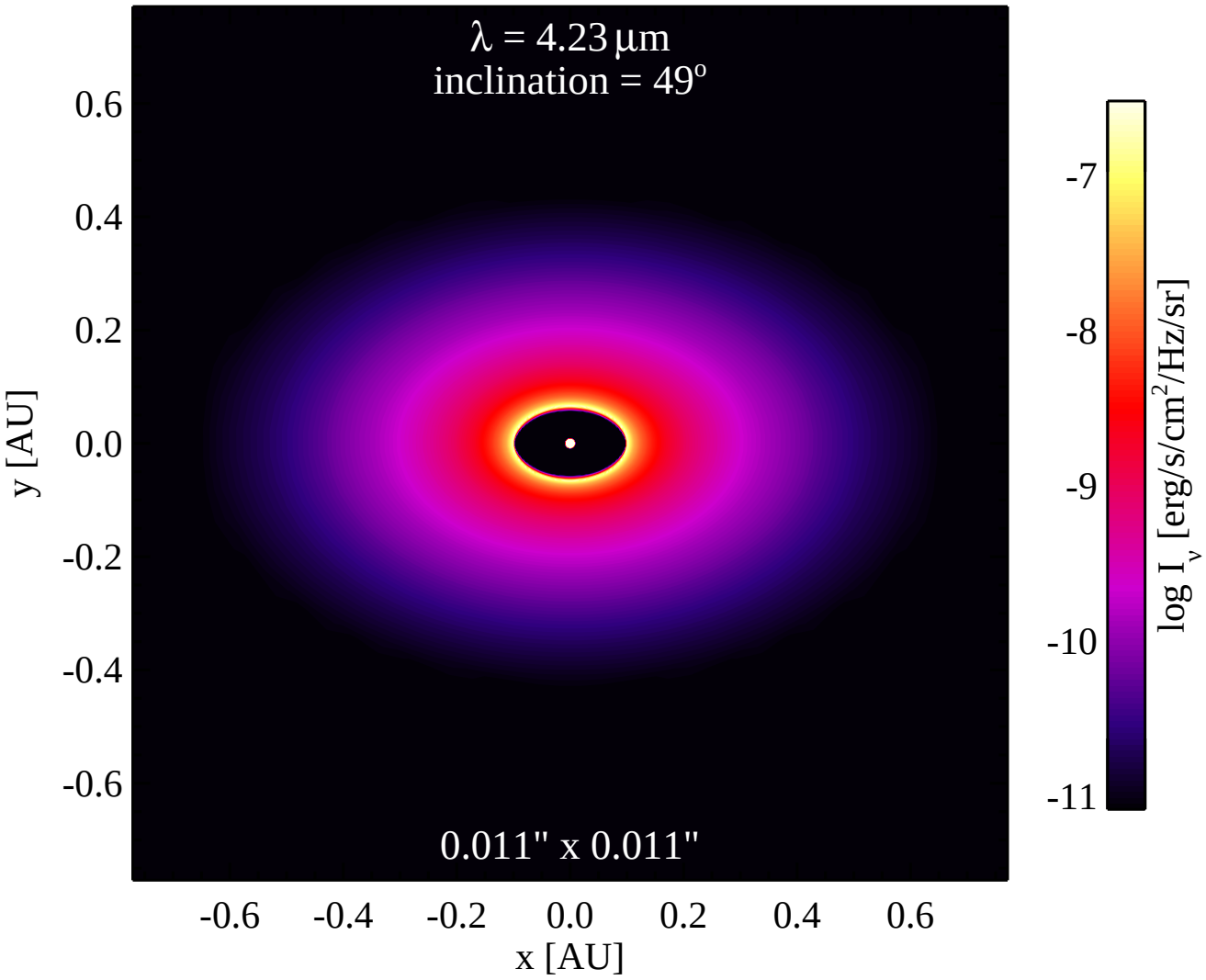

λ = 1.13 μm
inclination = 49°
1.26" x 1.26"
50
0
-50
y [AU]
-50
0
50
x [AU]
-13.5
-14.0
-14.5
-15.0
log I_ν [erg/s/cm²/Hz/sr]

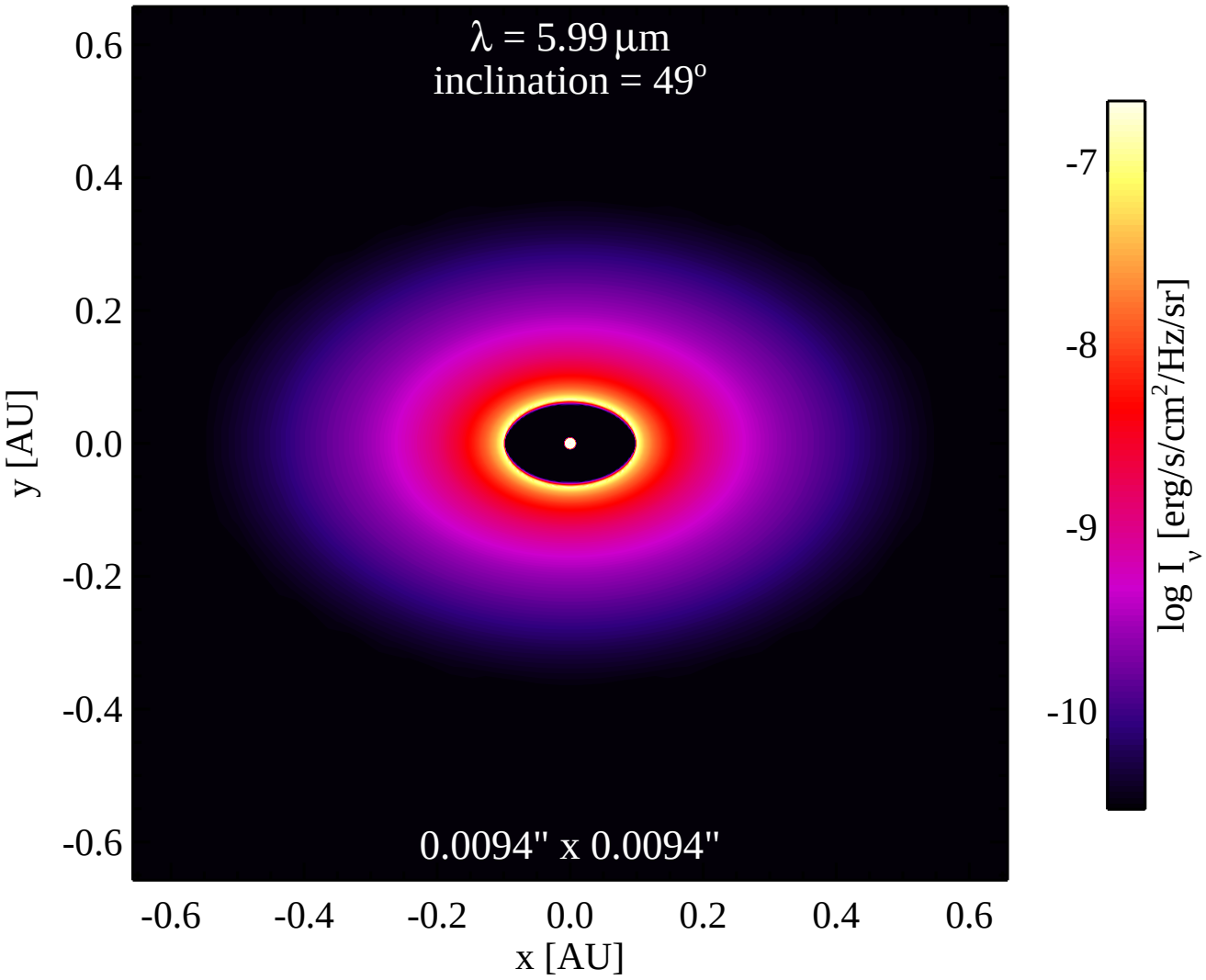

λ = 1.60 μm
inclination = 49°
0.99" x 0.99"
60
40
20
0
-20
-40
-60
y [AU]
-60
-40
-20
0
20
40
60
x [AU]
-13.4
-13.6
-13.8
-14.0
-14.2
-14.4
log I_ν [erg/s/cm²/Hz/sr]

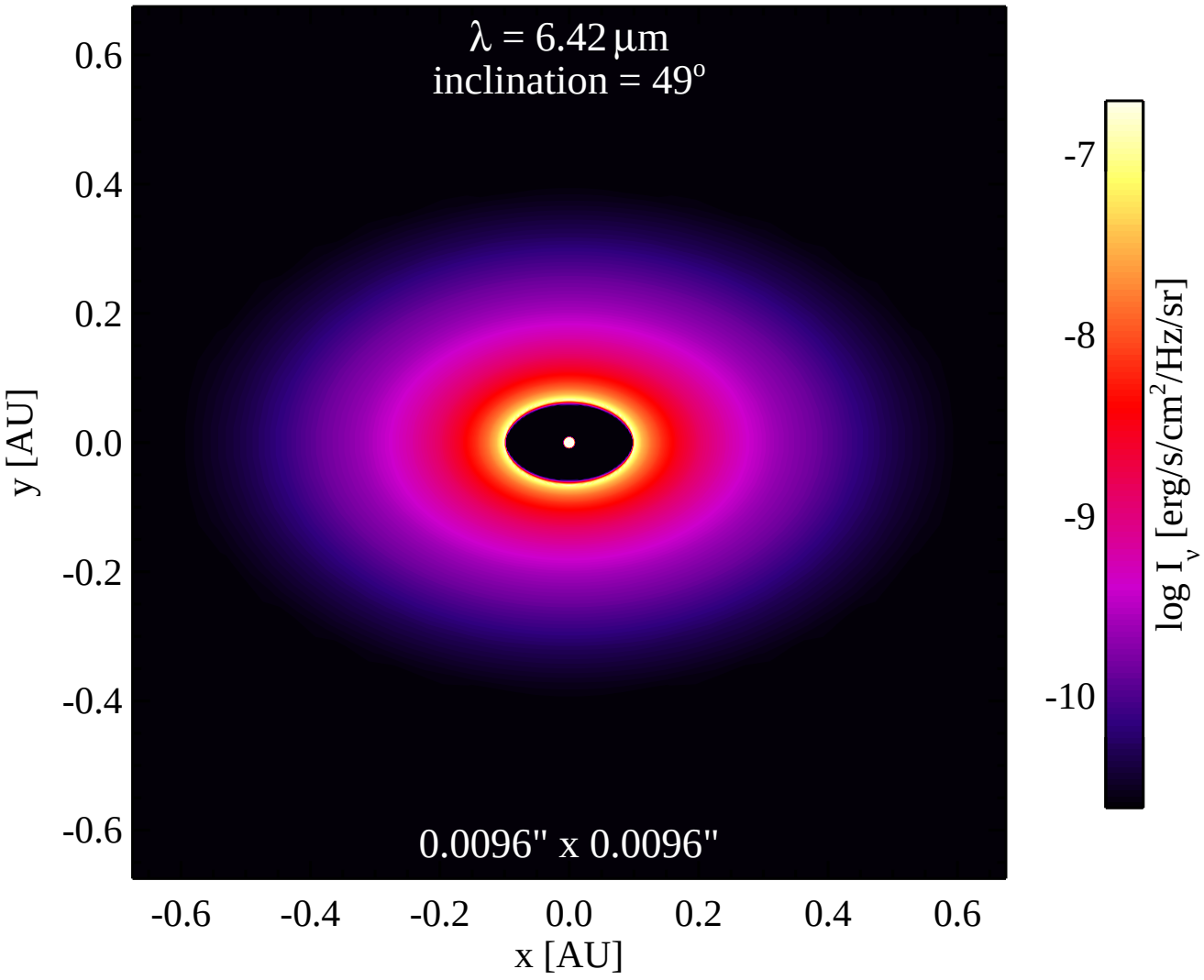

λ = 2.27 μm
inclination = 49°
0.80" x 0.80"
40
20
0
-20
-40
y [AU]
-40
-20
0
20
40
x [AU]
-13.4
-13.6
-13.8
-14.0
-14.2
log I_ν [erg/s/cm²/Hz/sr]

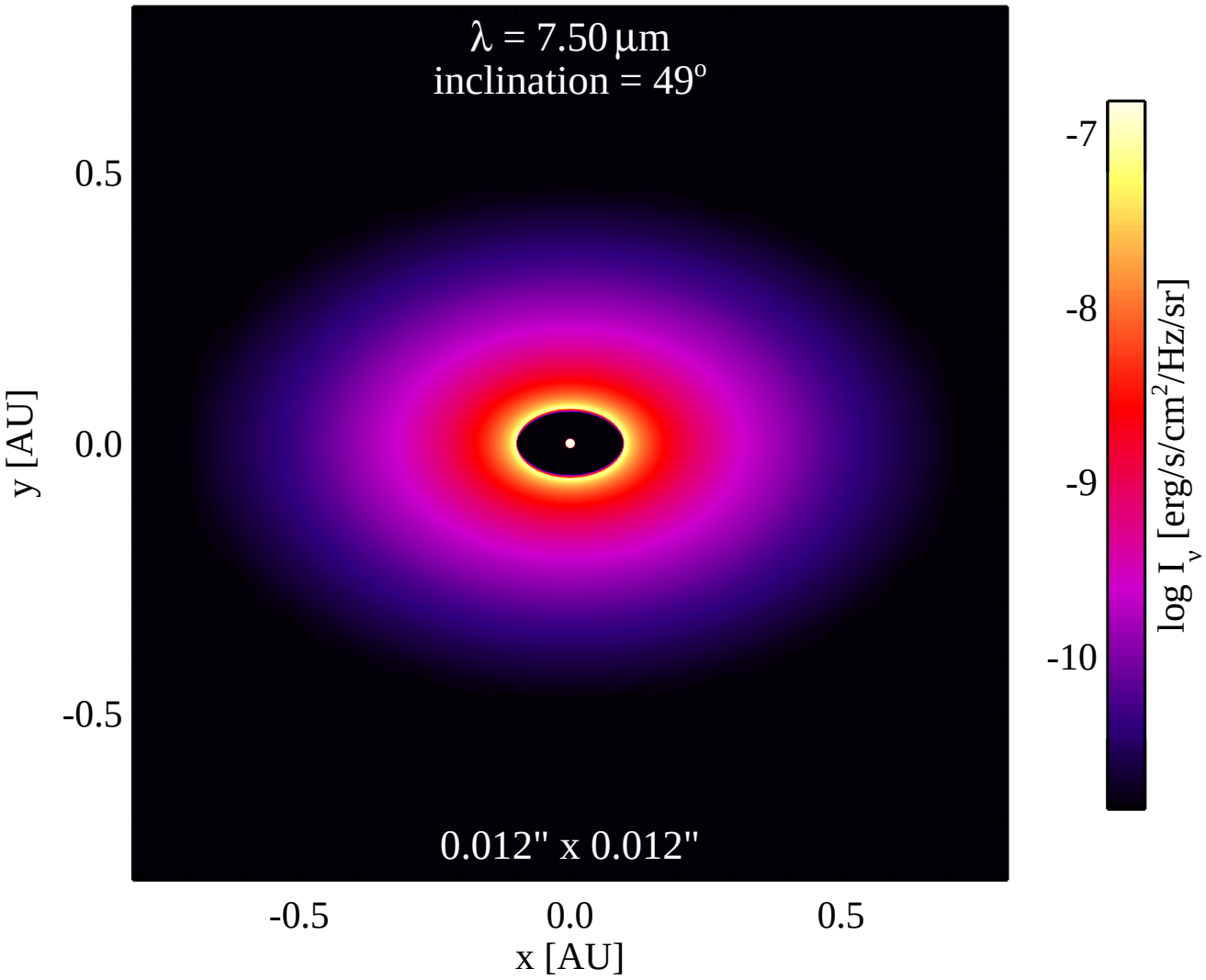

λ = 3.10 μm
inclination = 49°
0.66" x 0.66"
40
20
0
-20
-40
y [AU]
-40
-20
0
20
40
x [AU]
-13.6
-13.8
-14.0
-14.2
-14.4
log I_ν [erg/s/cm²/Hz/sr]

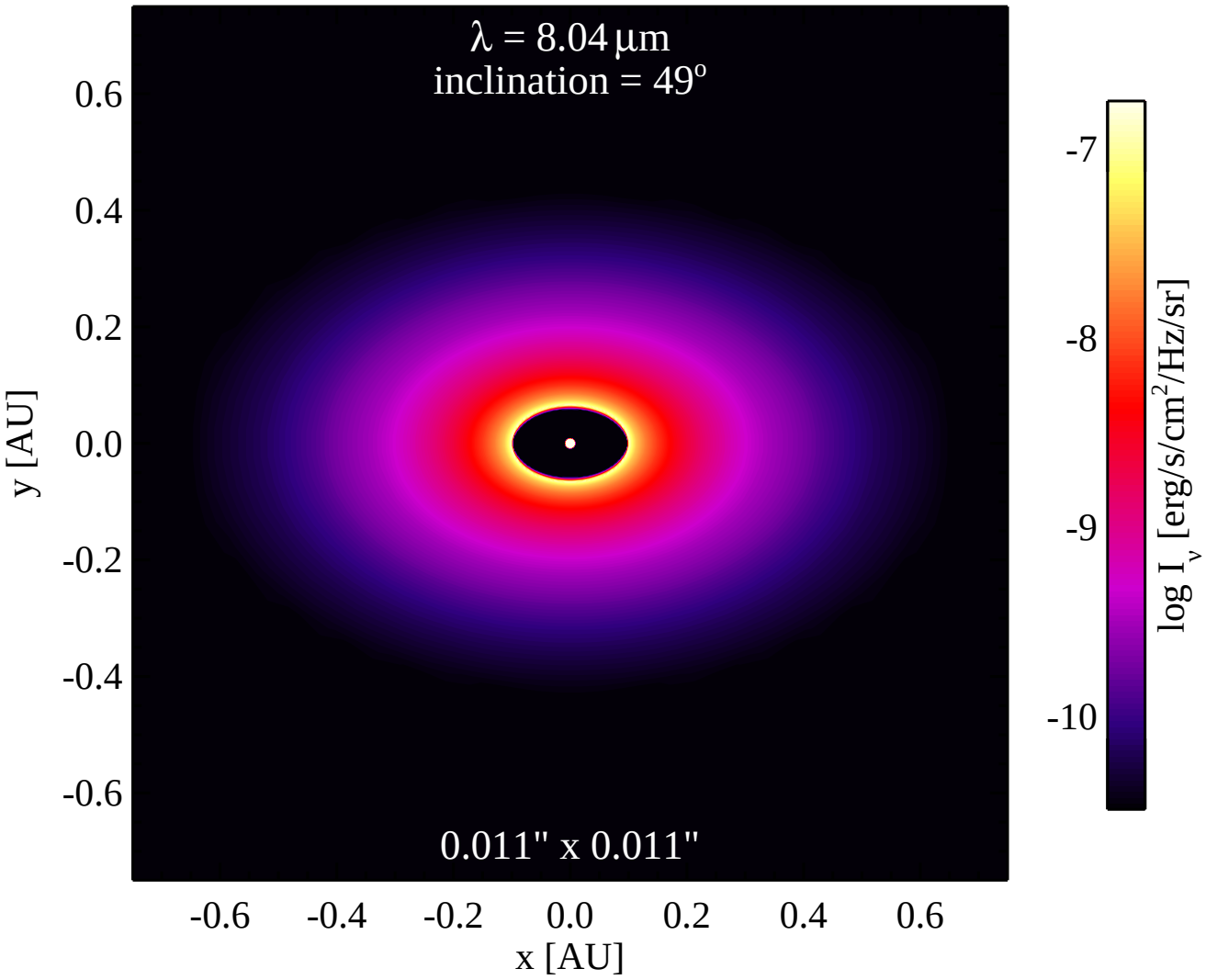

λ = 3.35 μm
inclination = 49°
0.62" x 0.62"
40
20
0
-20
-40
y [AU]
-40
-20
0
20
40
x [AU]
-13.2
-13.4
-13.6
-13.8
-14.0
log I_ν [erg/s/cm²/Hz/sr]

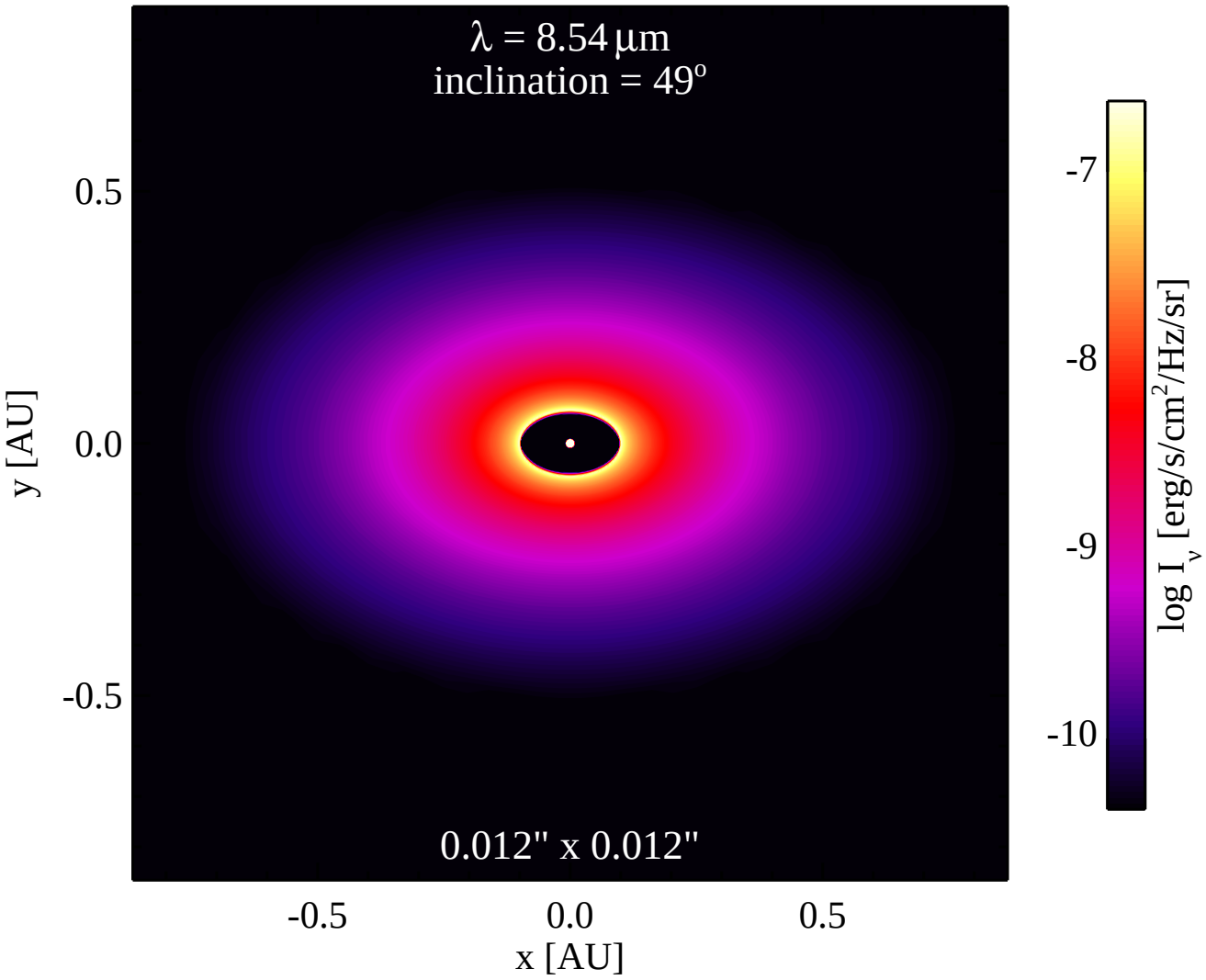

λ = 4.23 μm
inclination = 49°
0.011" x 0.011"
0.6
0.4
0.2
0.0
-0.2
-0.4
-0.6
y [AU]
-0.6
-0.4
-0.2
0.0
0.2
0.4
0.6
x [AU]
-7
-8
-9
-10
-11
log I_ν [erg/s/cm²/Hz/sr]

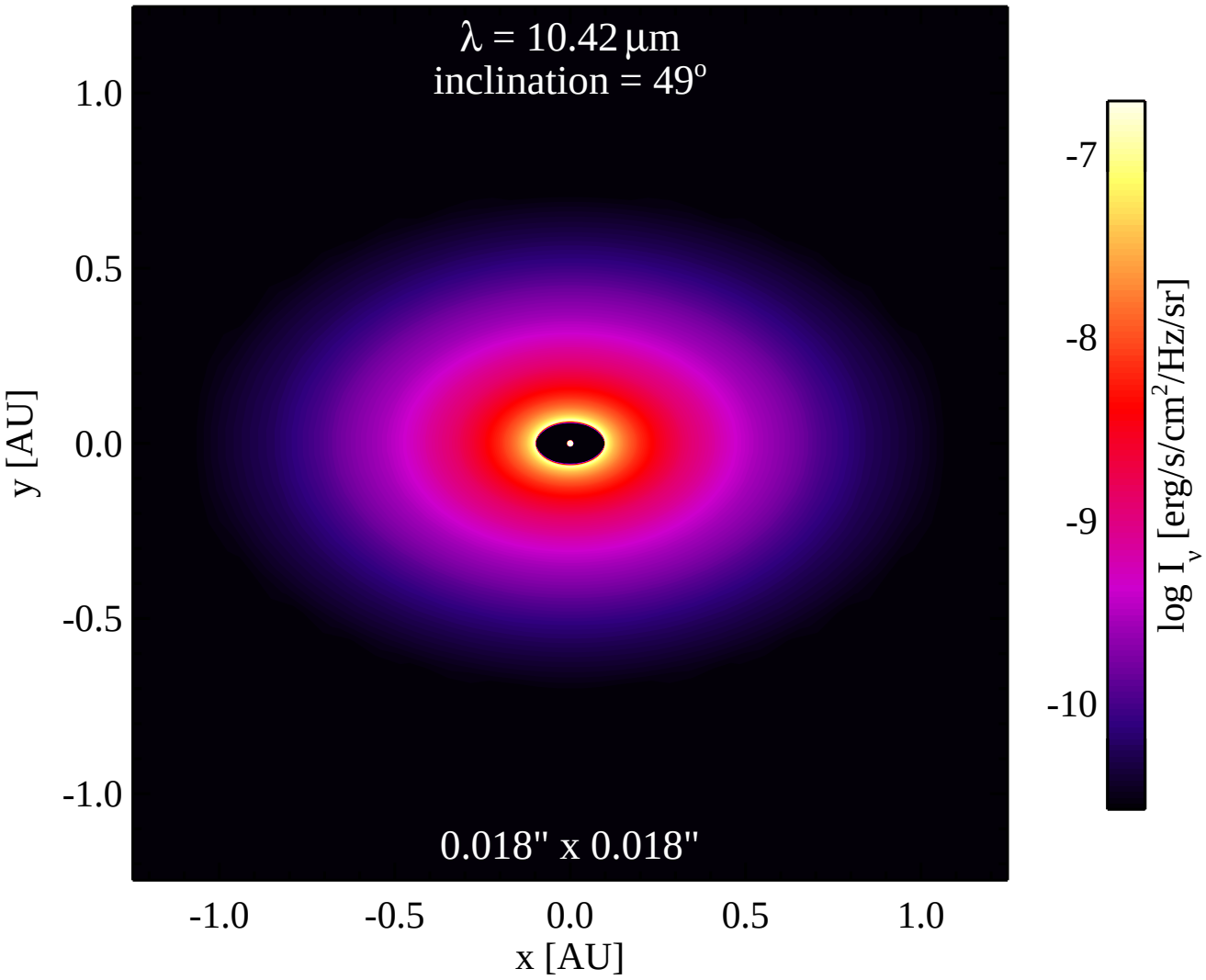

λ = 5.99 μm
inclination = 49°
0.0094" x 0.0094"
0.6
0.4
0.2
0.0
-0.2
-0.4
-0.6
y [AU]
-0.6
-0.4
-0.2
0.0
0.2
0.4
0.6
x [AU]
-7
-8
-9
-10
log I_ν [erg/s/cm²/Hz/sr]

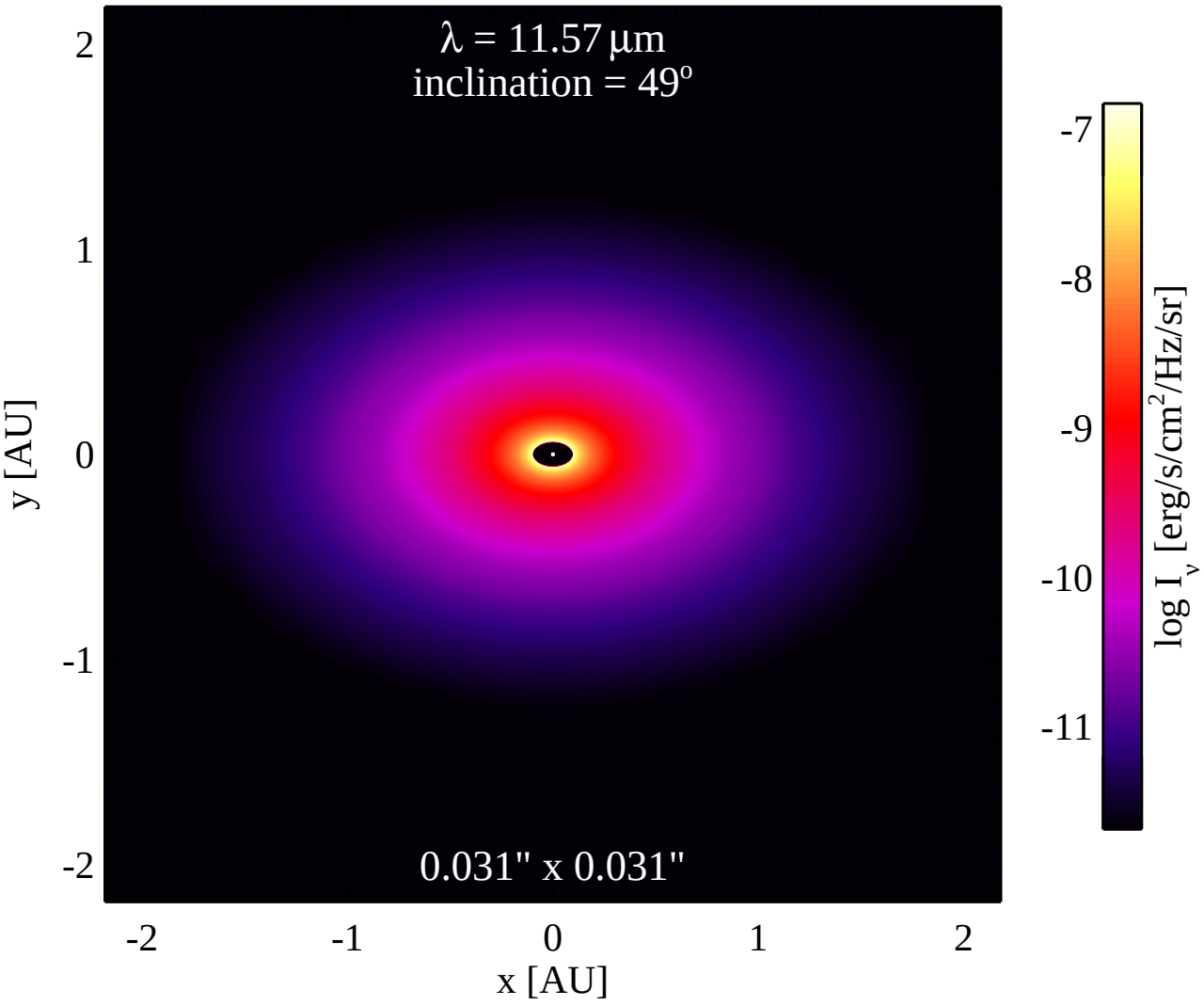

λ = 6.42 μm
inclination = 49°
0.0096" x 0.0096"
0.6
0.4
0.2
0.0
-0.2
-0.4
-0.6
y [AU]
-0.6
-0.4
-0.2
0.0
0.2
0.4
0.6
x [AU]
-7
-8
-9
-10
log I_ν [erg/s/cm²/Hz/sr]

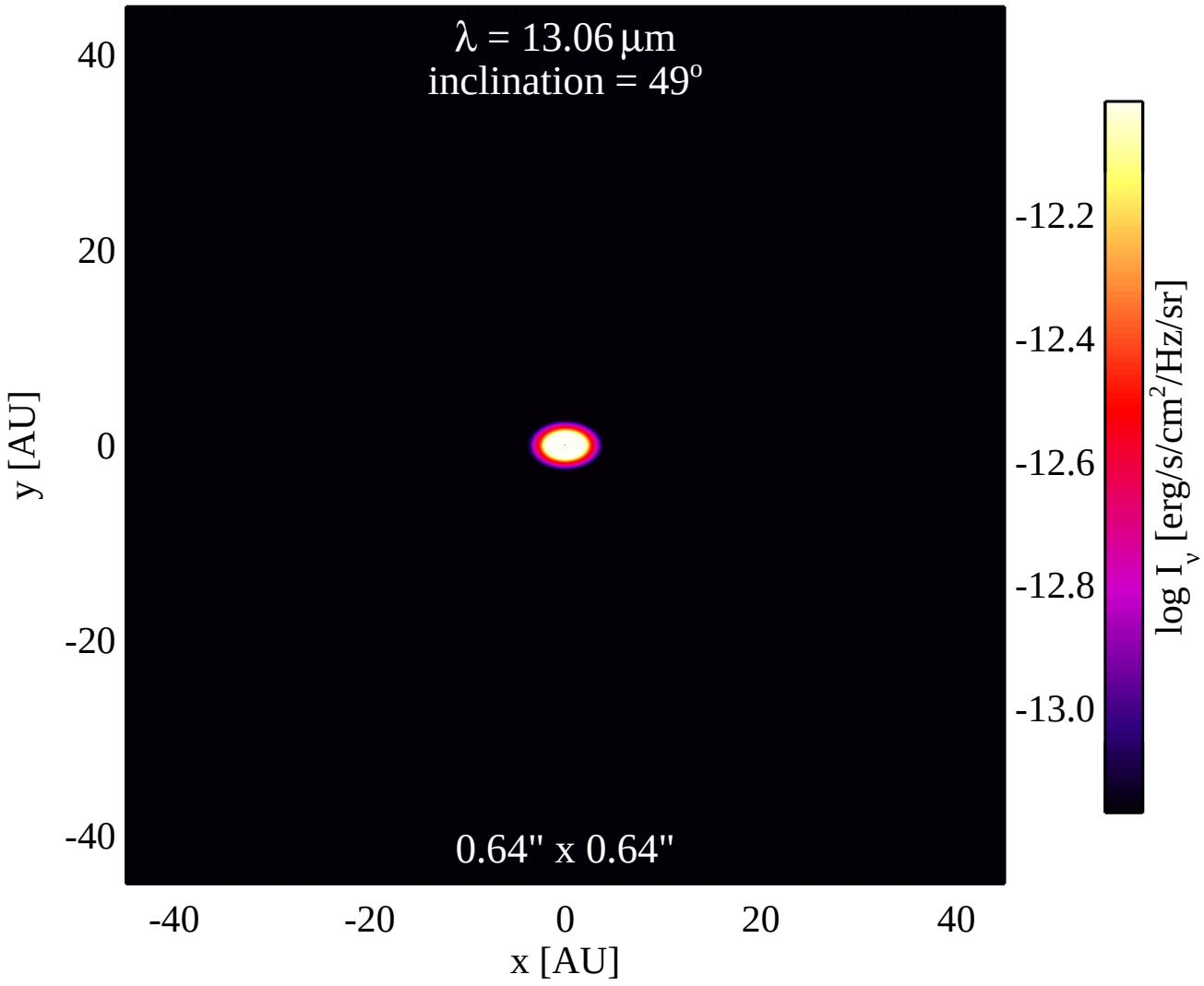

λ = 7.50 μm
inclination = 49°
0.012" x 0.012"
0.5
0.0
-0.5
y [AU]
-0.5
0.0
0.5
x [AU]
-7
-8
-9
-10
log I_ν [erg/s/cm²/Hz/sr]

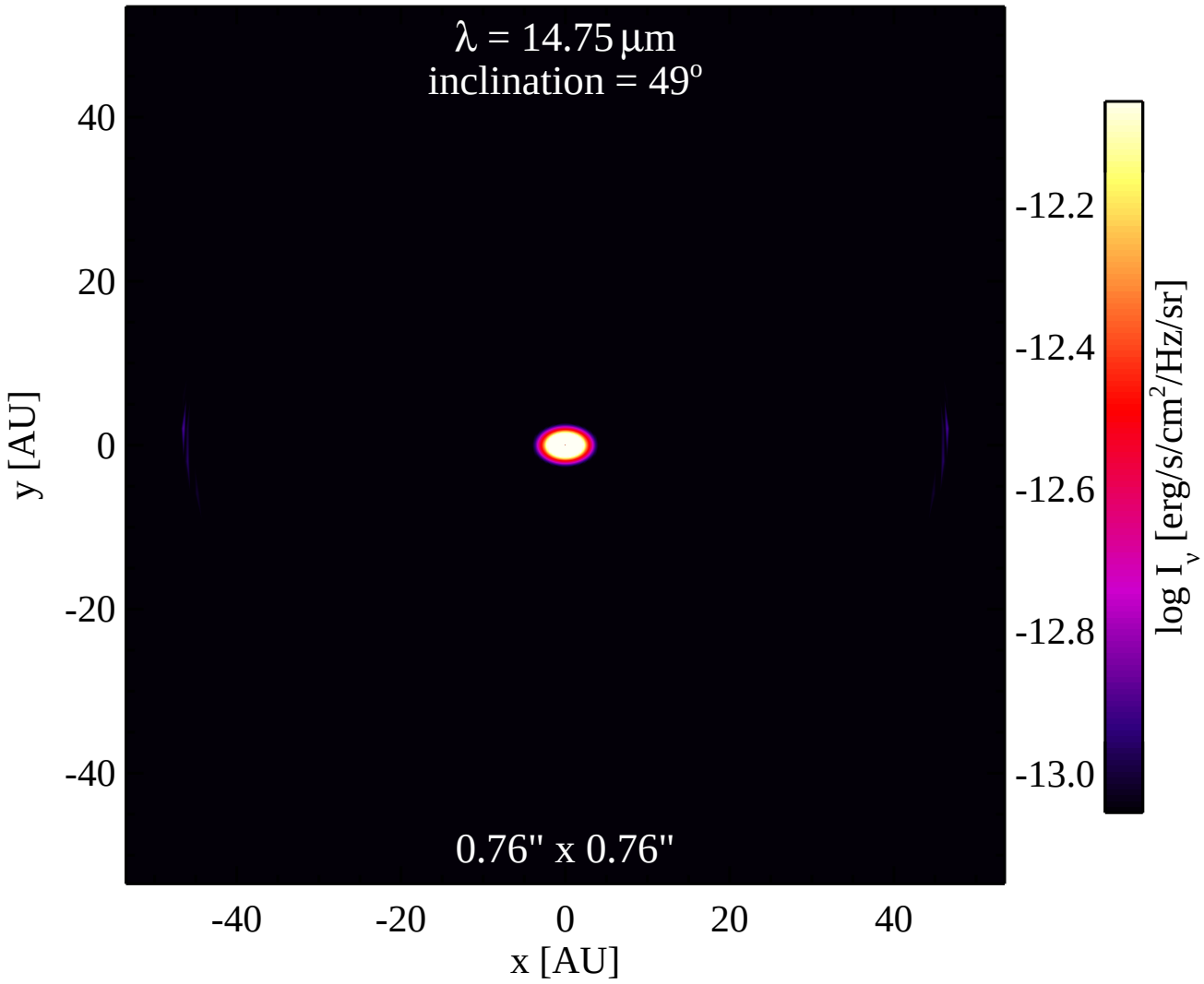

λ = 8.04 μm
inclination = 49°
0.011" x 0.011"
0.6
0.4
0.2
0.0
-0.2
-0.4
-0.6
y [AU]
-0.6
-0.4
-0.2
0.0
0.2
0.4
0.6
x [AU]
-7
-8
-9
-10
log I_ν [erg/s/cm²/Hz/sr]

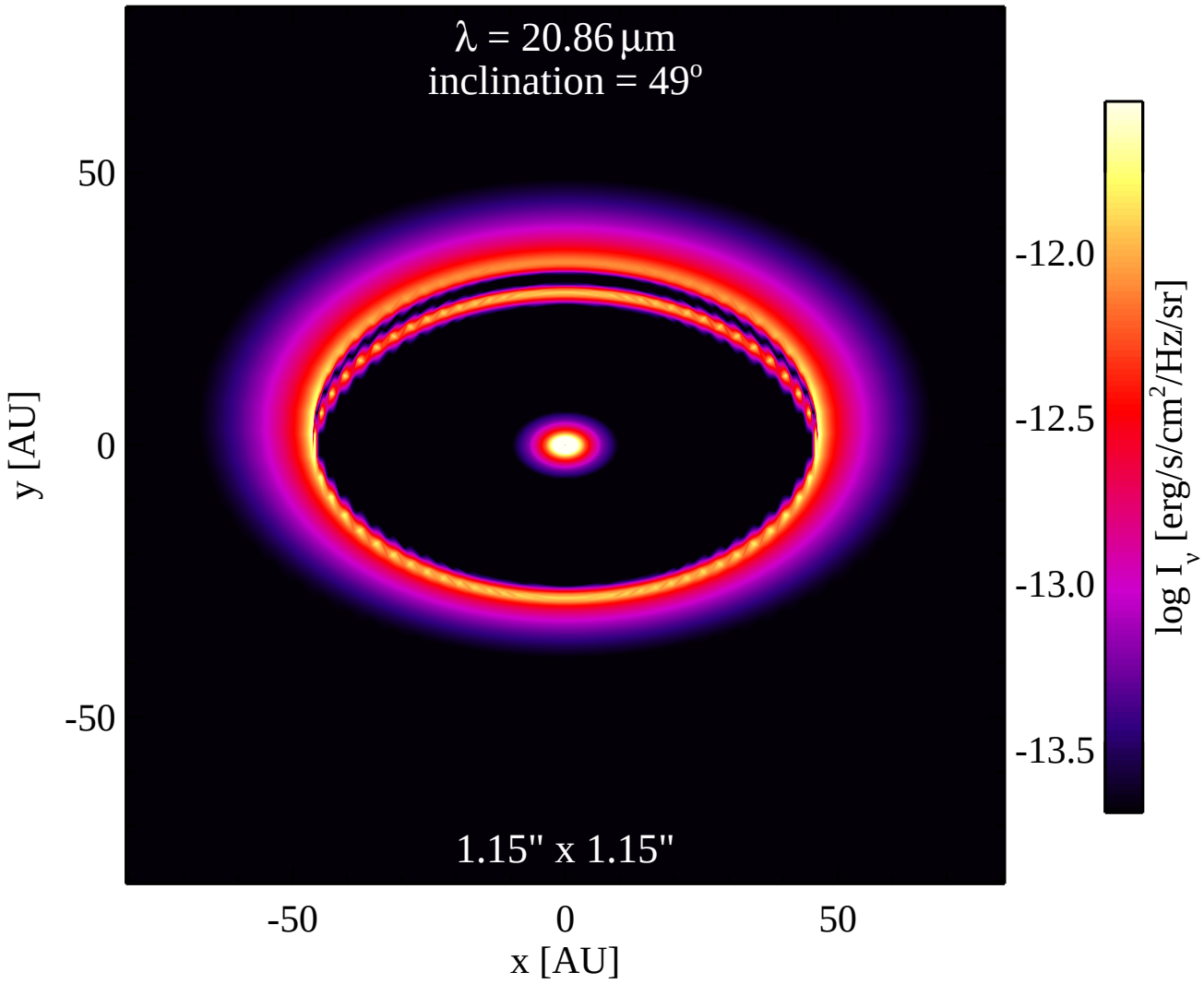

λ = 8.54 μm
inclination = 49°
0.012" x 0.012"
0.5
0.0
-0.5
y [AU]
-0.5
0.0
0.5
x [AU]
-7
-8
-9
-10
log I_ν [erg/s/cm²/Hz/sr]

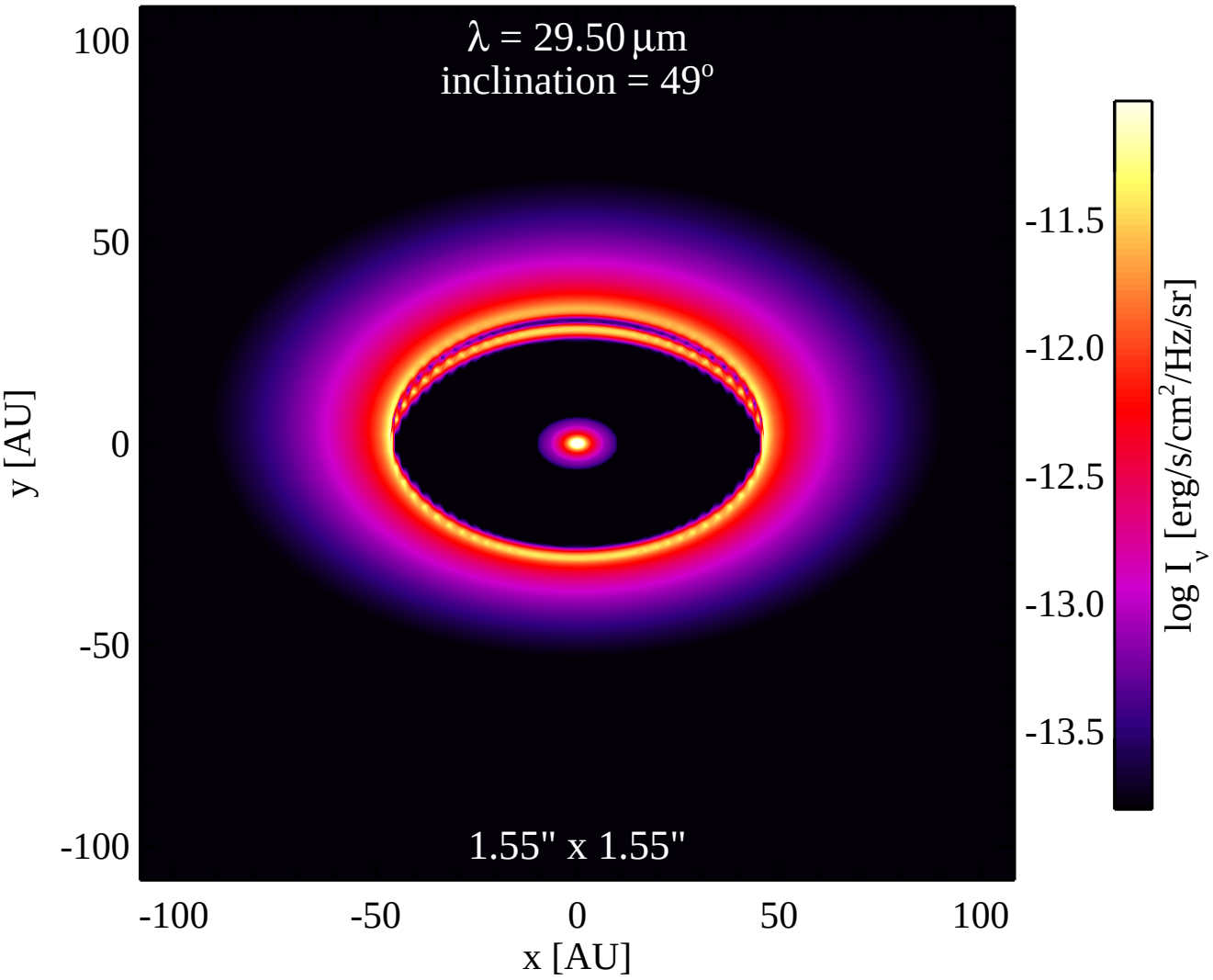

λ = 10.42 μm
inclination = 49°
0.018" x 0.018"
1.0
0.5
0.0
-0.5
-1.0
y [AU]
-1.0
-0.5
0.0
0.5
1.0
x [AU]
-7
-8
-9
-10
log I_ν [erg/s/cm²/Hz/sr]

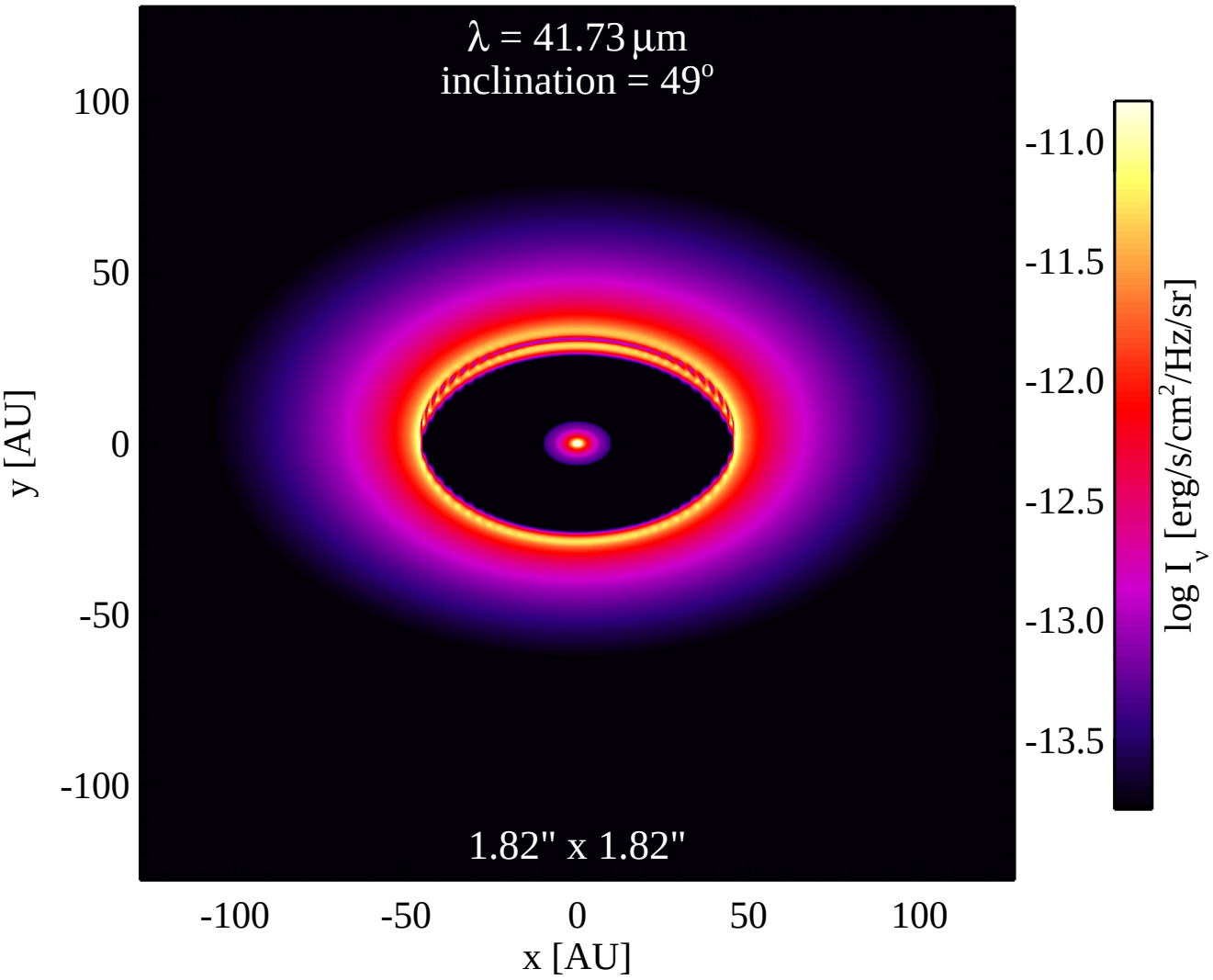

λ = 11.57 μm
inclination = 49°
0.031" x 0.031"
2
1
0
-1
-2
y [AU]
-2
-1
0
1
2
x [AU]
-7
-8
-9
-10
-11
log I_ν [erg/s/cm²/Hz/sr]

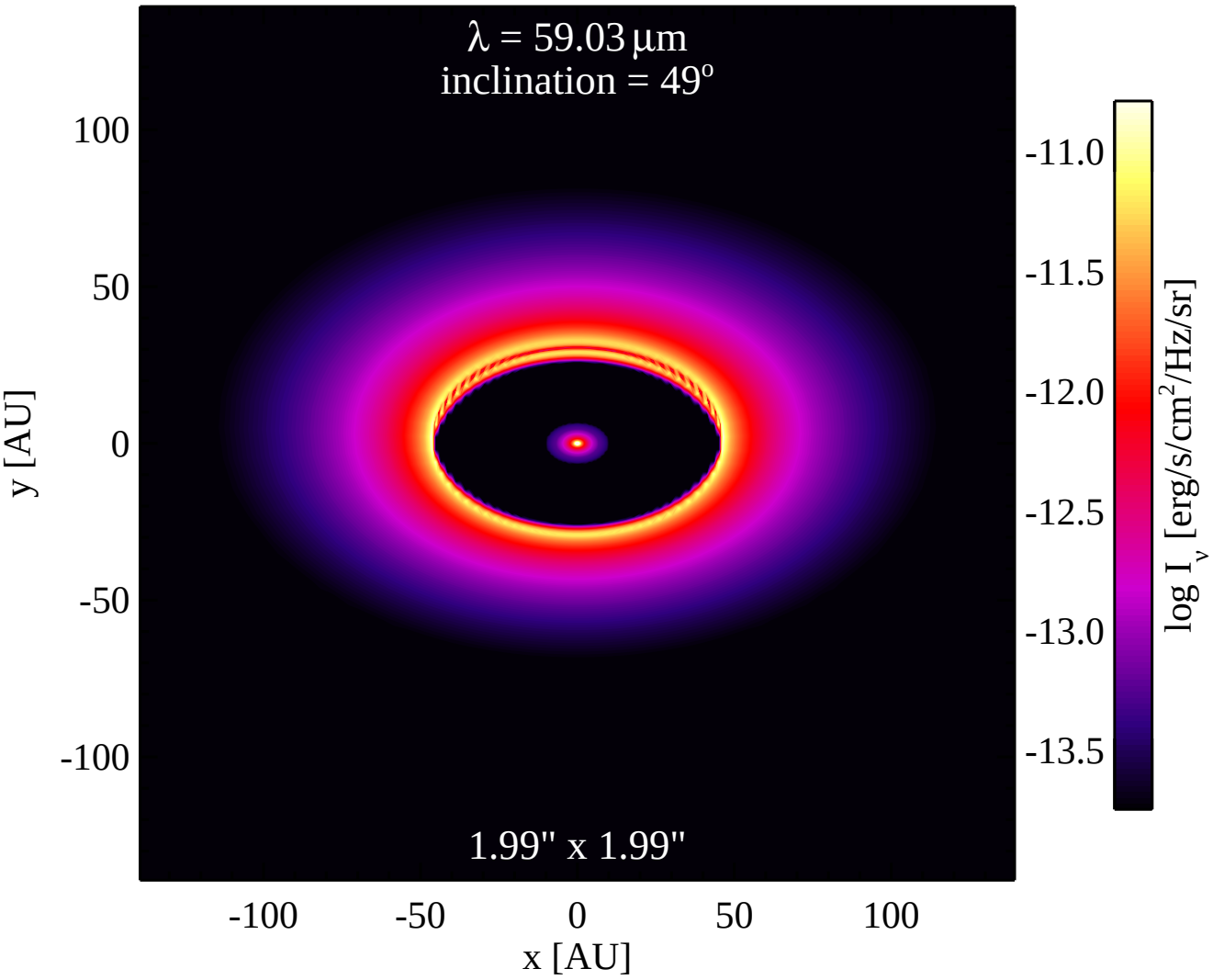

λ = 13.06 μm
inclination = 49°
0.64" x 0.64"
40
20
0
-20
-40
y [AU]
-40
-20
0
20
40
x [AU]
-12.2
-12.4
-12.6
-12.8
-13.0
log I_ν [erg/s/cm²/Hz/sr]

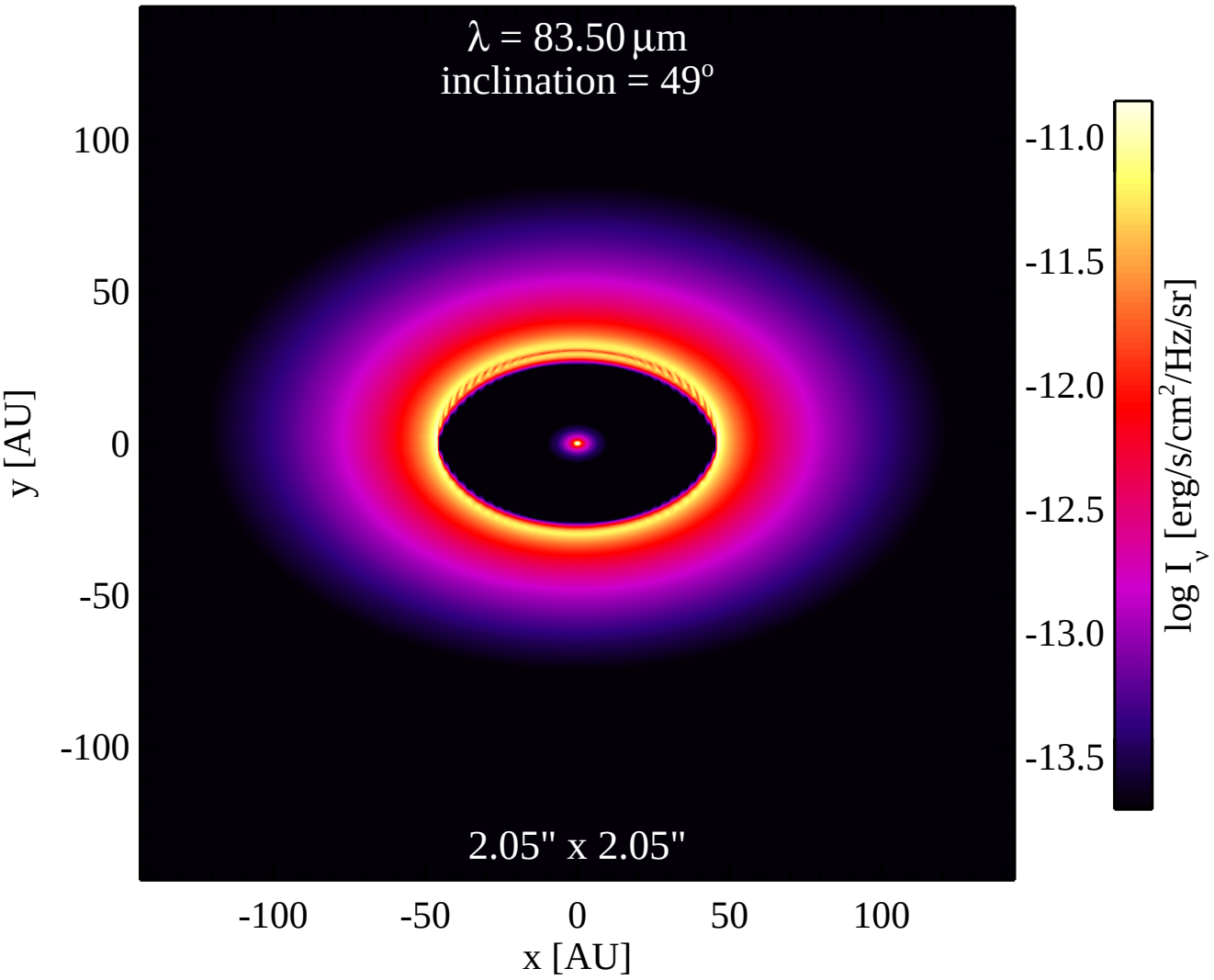

λ = 14.75 μm
inclination = 49°
0.76" x 0.76"
40
20
0
-20
-40
y [AU]
-40
-20
0
20
40
x [AU]
-12.2
-12.4
-12.6
-12.8
-13.0
log I_ν [erg/s/cm²/Hz/sr]

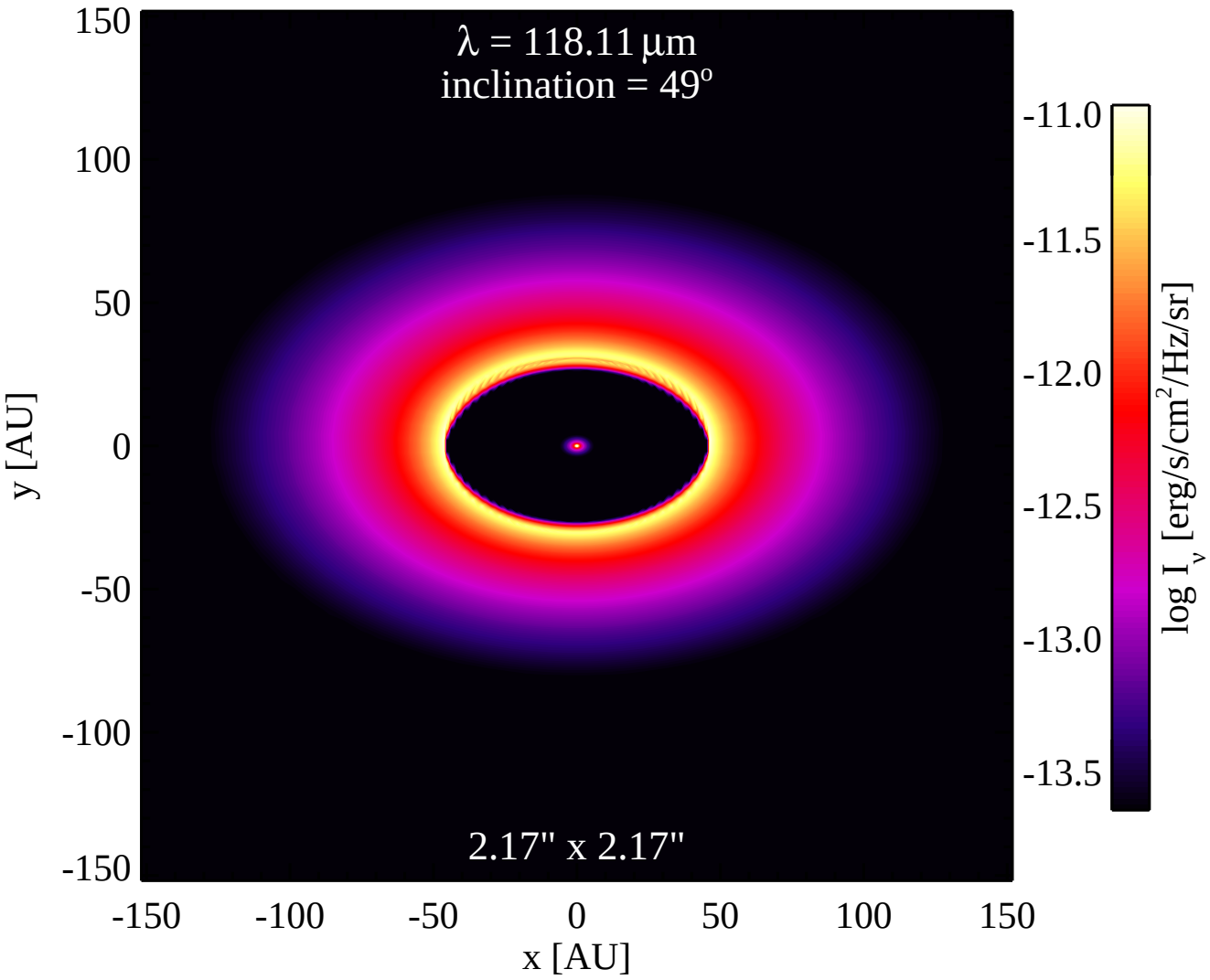

λ = 20.86 μm
inclination = 49°
1.15" x 1.15"
50
0
-50
y [AU]
-50
0
50
x [AU]
-12.0
-12.5
-13.0
-13.5
log I_ν [erg/s/cm²/Hz/sr]

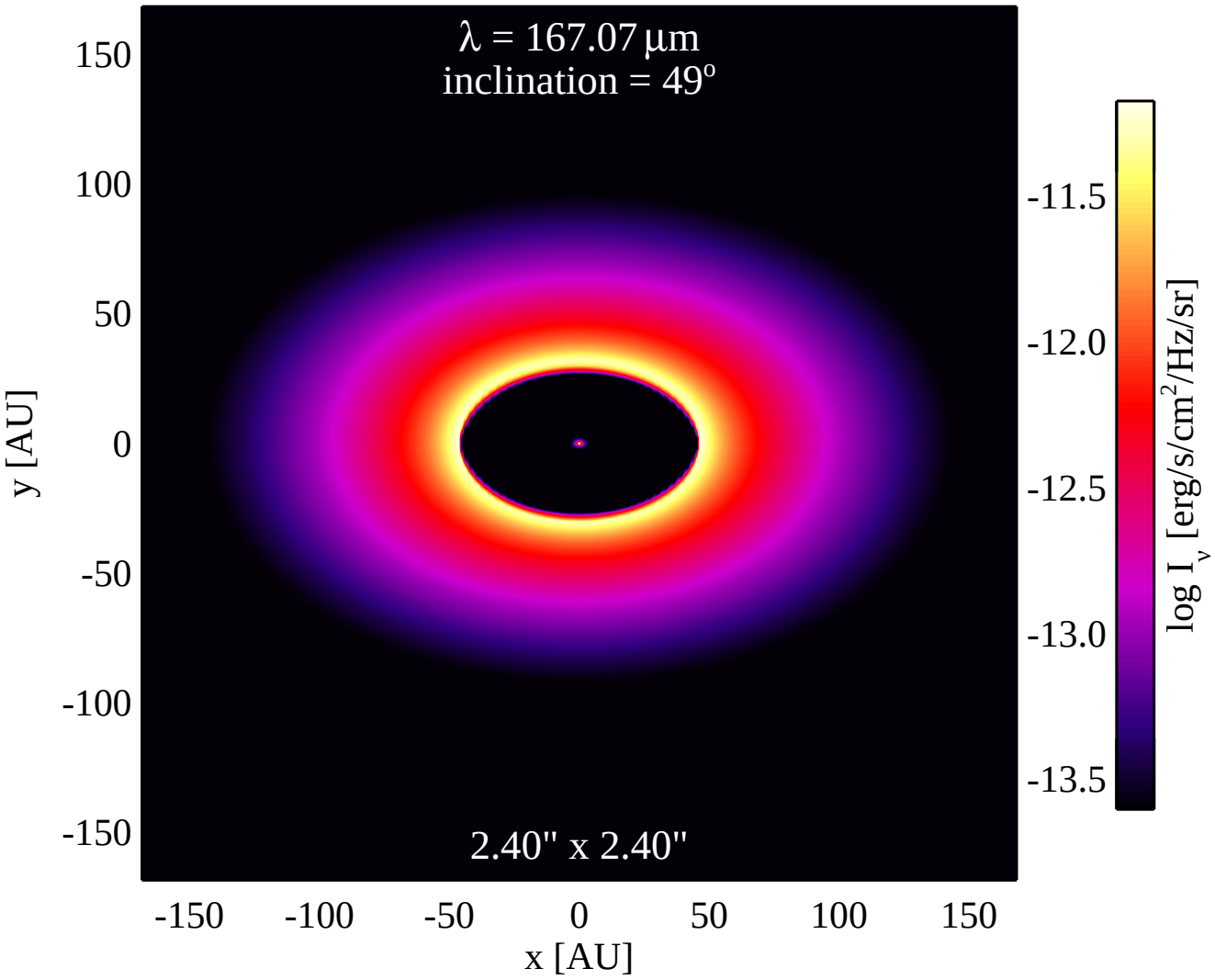

λ = 29.50 μm
inclination = 49°
1.55" x 1.55"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-11.5
-12.0
-12.5
-13.0
-13.5
log I_ν [erg/s/cm²/Hz/sr]

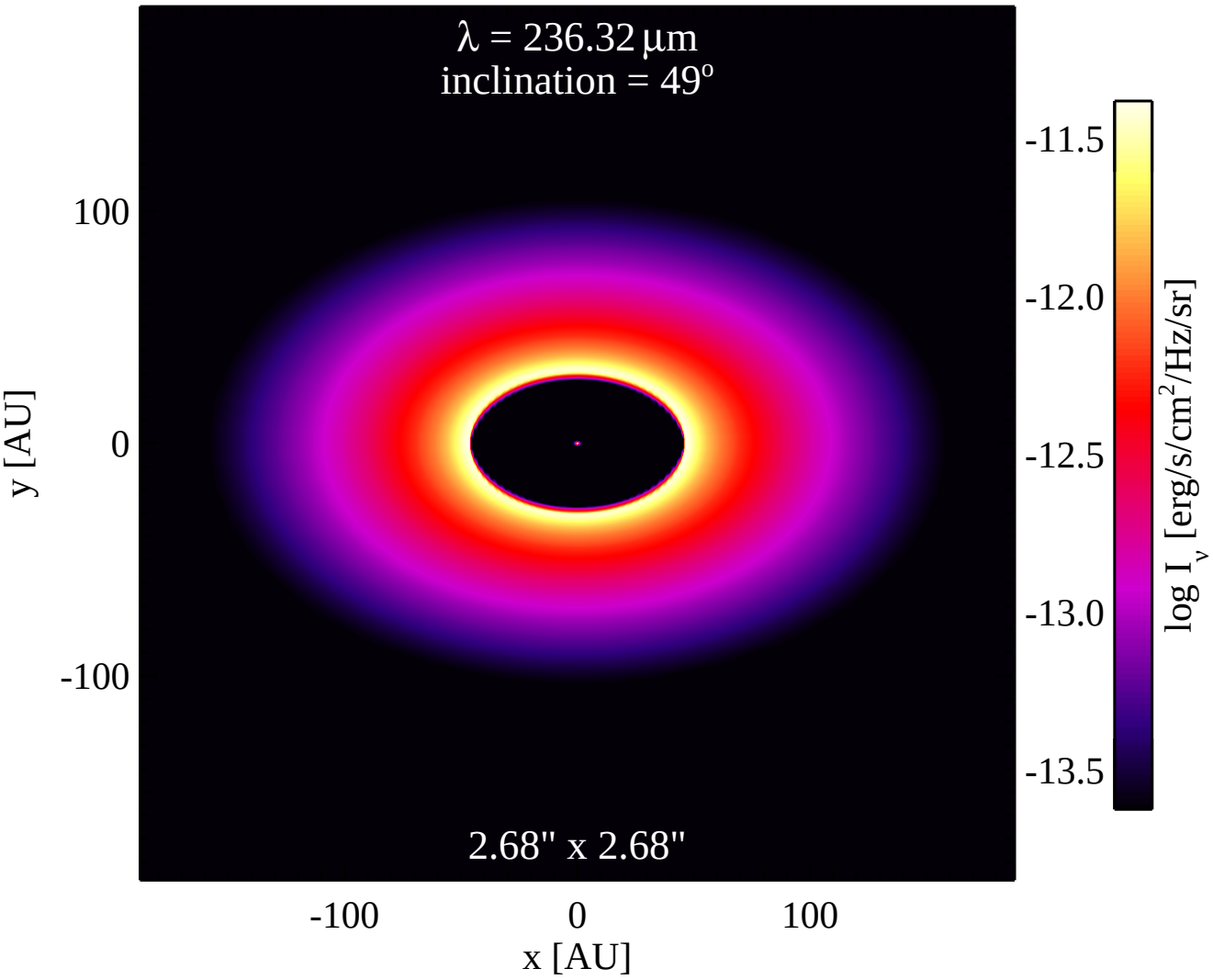

λ = 41.73 μm
inclination = 49°
1.82" x 1.82"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-11.0
-11.5
-12.0
-12.5
-13.0
-13.5
log I_ν [erg/s/cm²/Hz/sr]

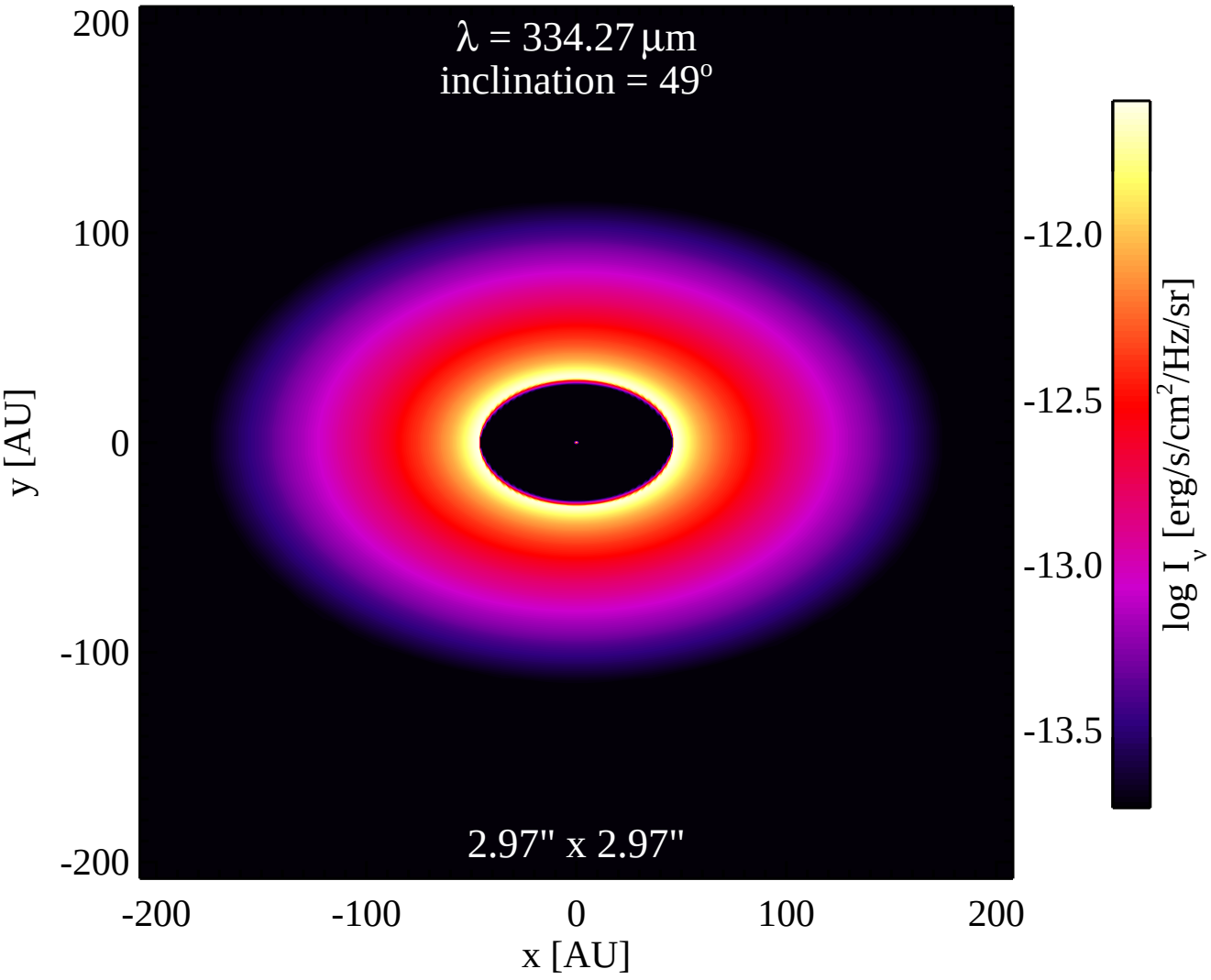

λ = 59.03 μm
inclination = 49°
1.99" x 1.99"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-11.0
-11.5
-12.0
-12.5
-13.0
-13.5
log I_ν [erg/s/cm²/Hz/sr]

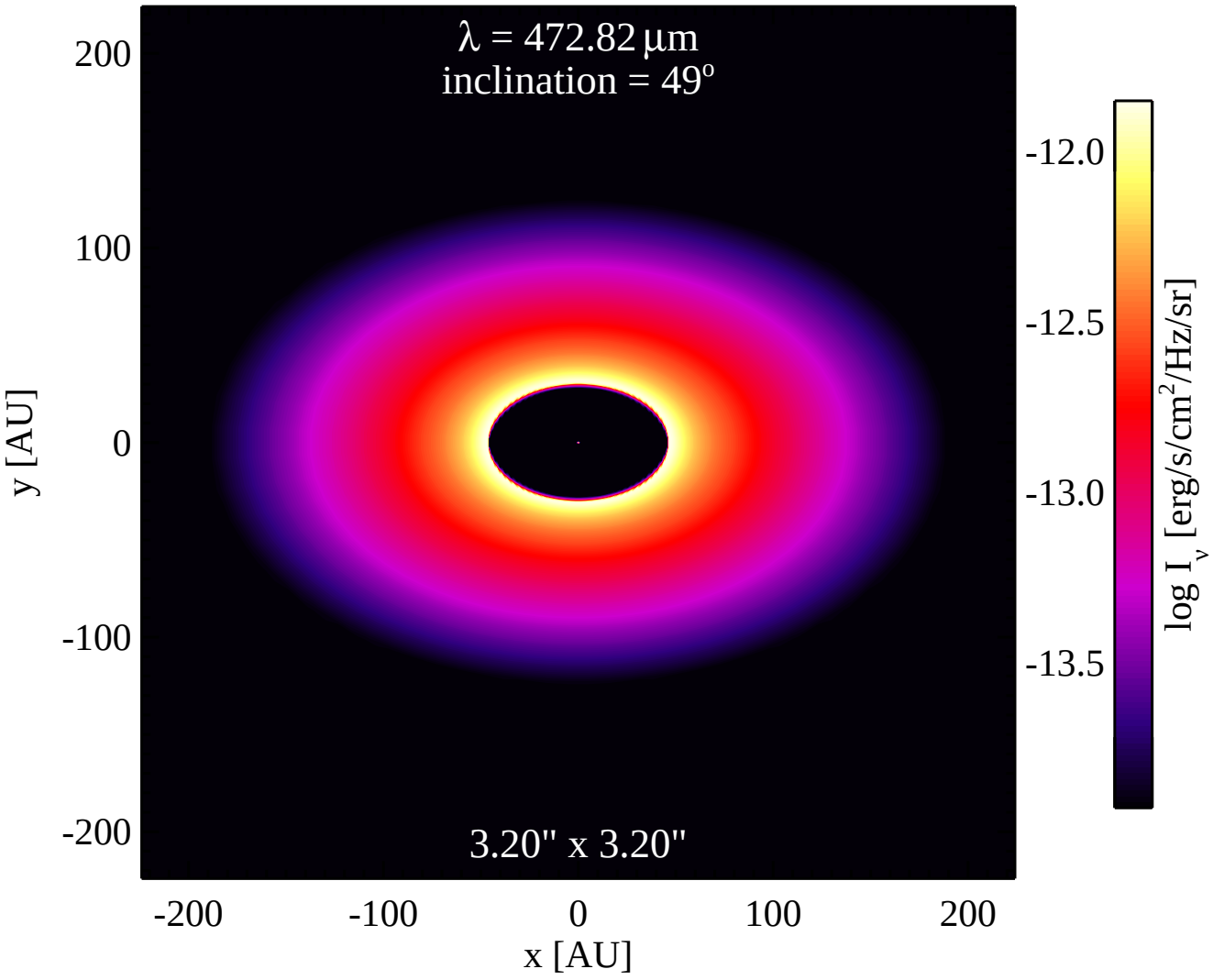

λ = 83.50 μm
inclination = 49°
2.05" x 2.05"
100
50
0
-50
-100
y [AU]
-100
-50
0
50
100
x [AU]
-11.0
-11.5
-12.0
-12.5
-13.0
-13.5
log I_ν [erg/s/cm²/Hz/sr]

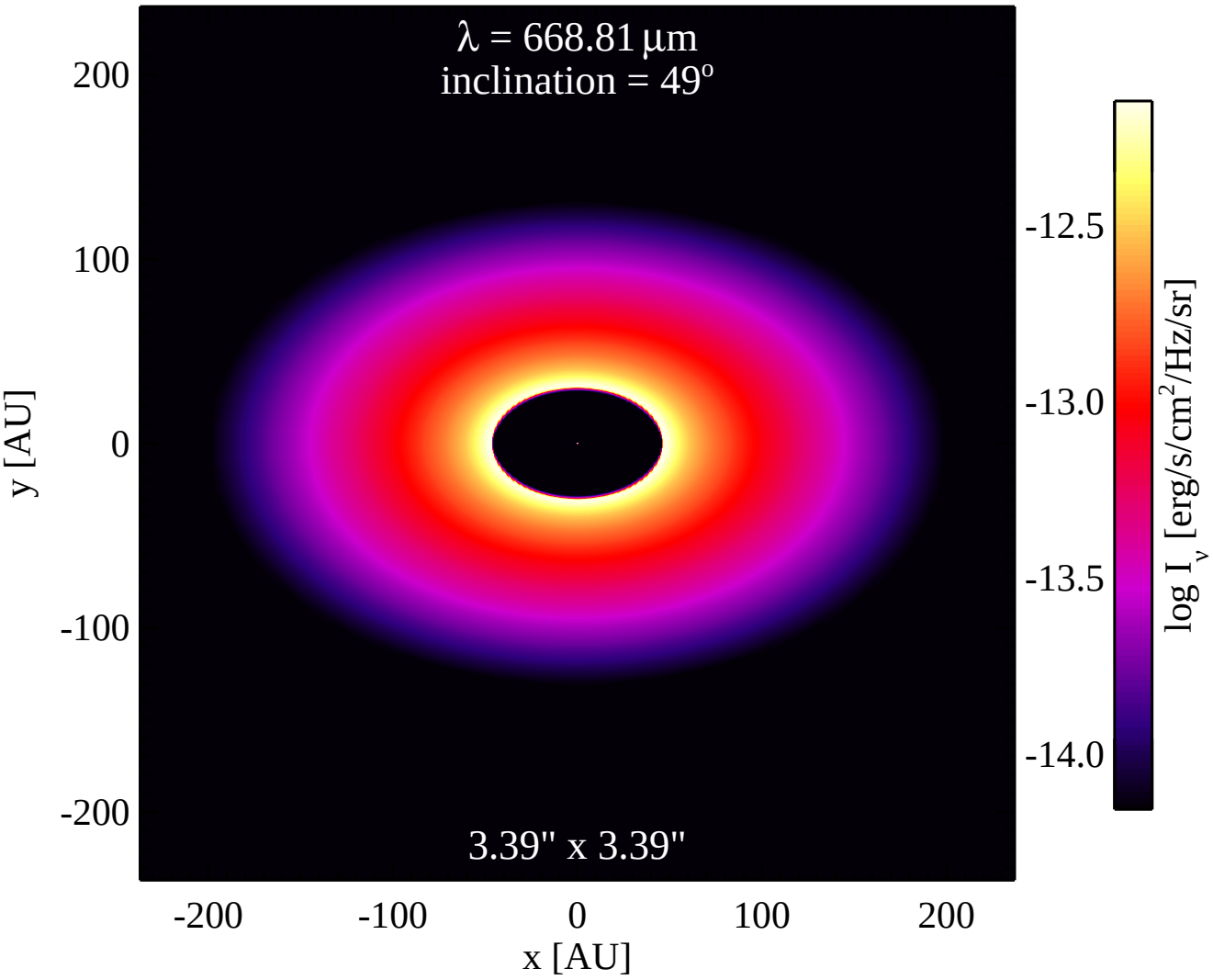

λ = 118.11 μm
inclination = 49°
2.17" x 2.17"
150
100
50
0
-50
-100
-150
y [AU]
-150
-100
-50
0
50
100
150
x [AU]
-11.0
-11.5
-12.0
-12.5
-13.0
-13.5
log I_ν [erg/s/cm²/Hz/sr]

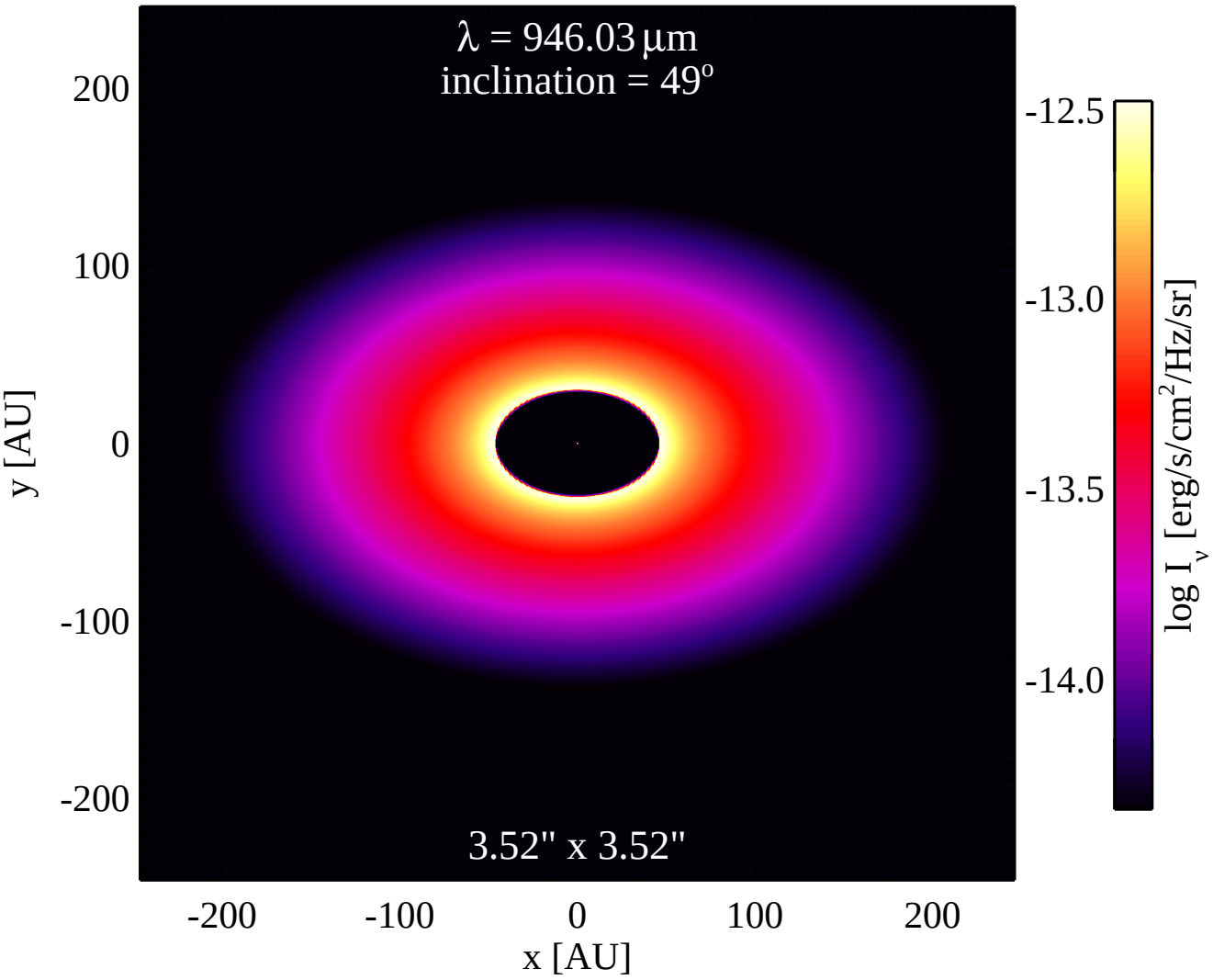

λ = 167.07 μm
inclination = 49°
2.40" x 2.40"
150
100
50
0
-50
-100
-150
y [AU]
-150
-100
-50
0
50
100
150
x [AU]
-11.5
-12.0
-12.5
-13.0
-13.5
log I_ν [erg/s/cm²/Hz/sr]

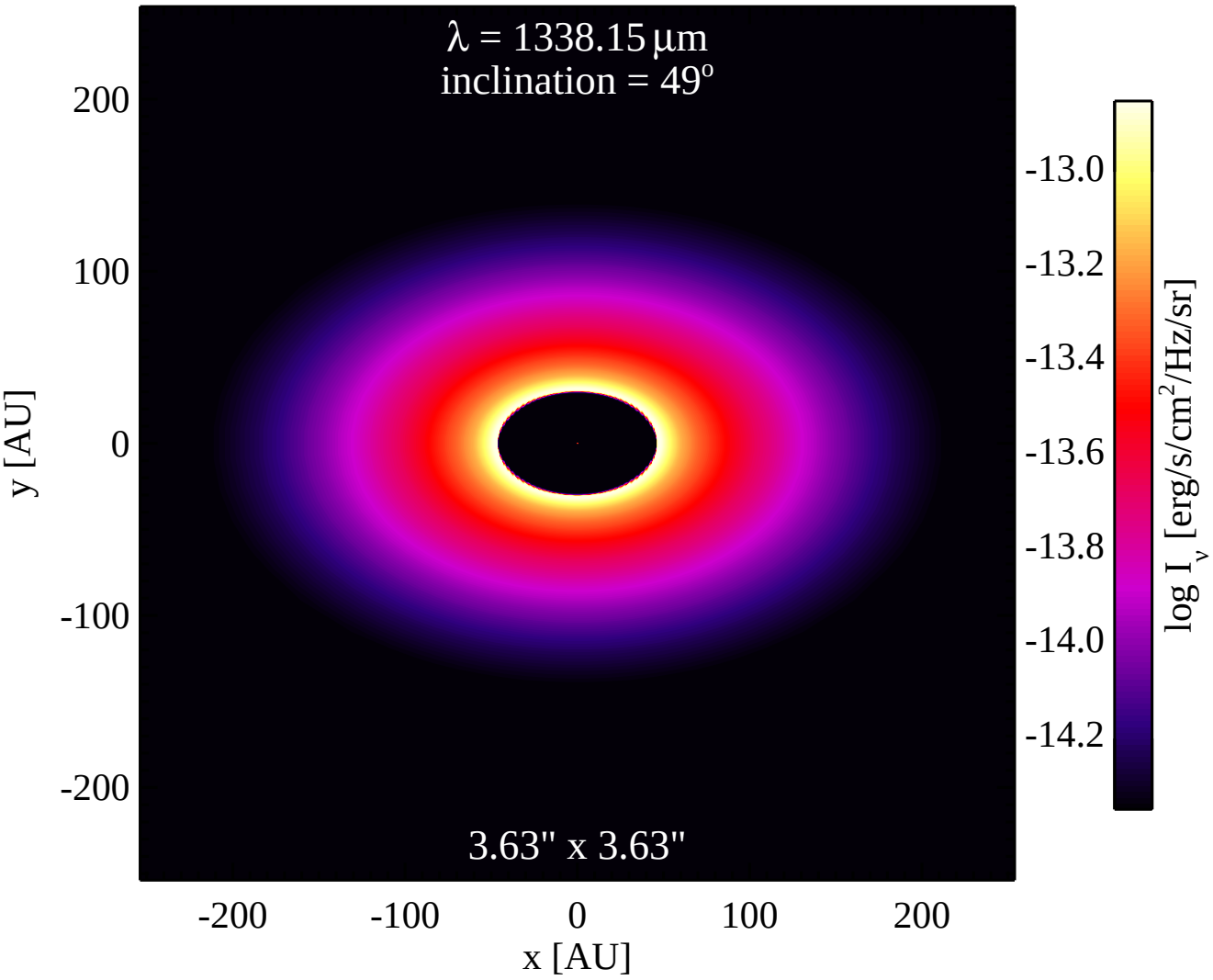

λ = 236.32 μm
inclination = 49°
2.68" x 2.68"
100
0
-100
y [AU]
-100
0
100
x [AU]
-11.5
-12.0
-12.5
-13.0
-13.5
log I_ν [erg/s/cm²/Hz/sr]

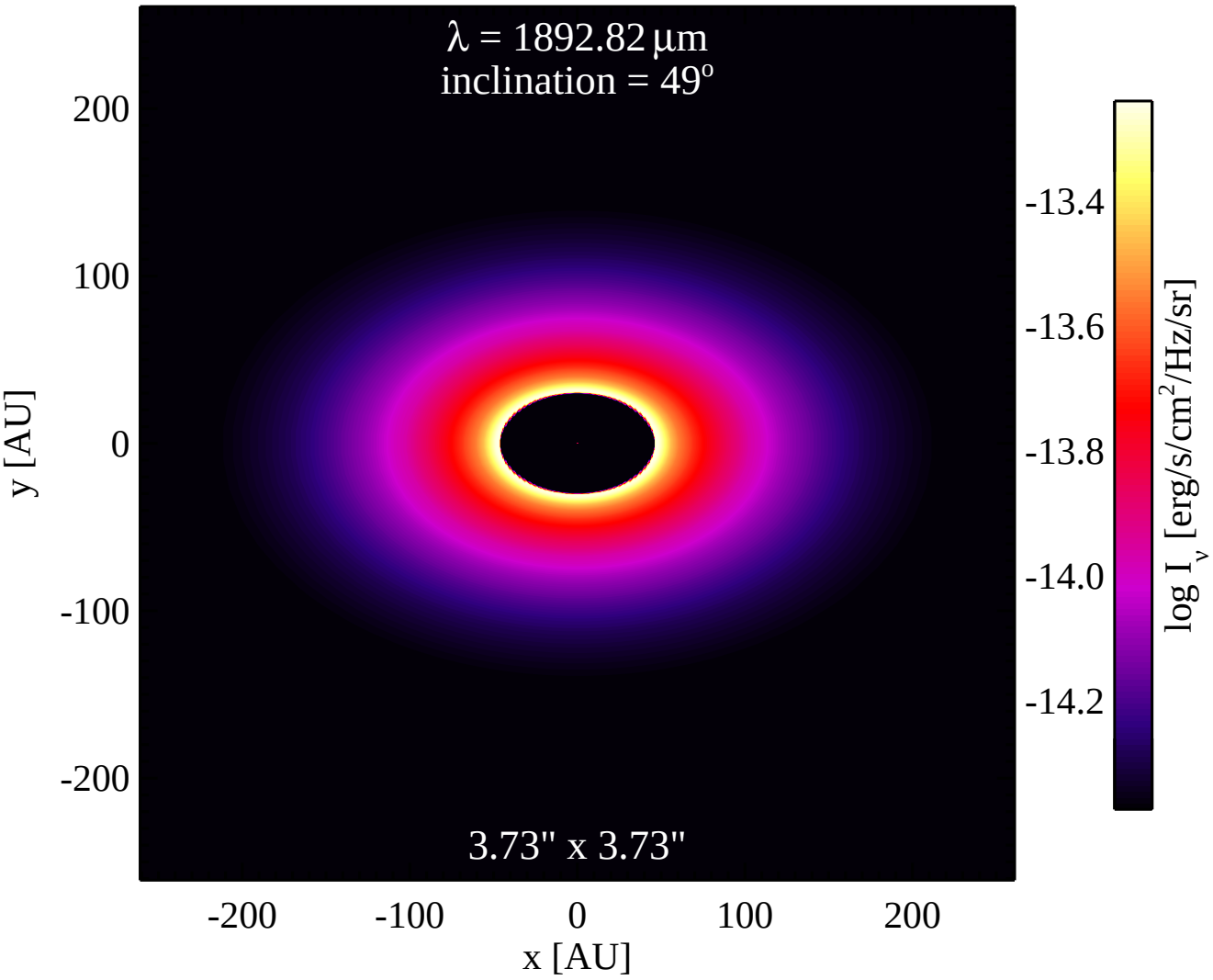

λ = 334.27 μm
inclination = 49°
2.97" x 2.97"
200
100
0
-100
-200
y [AU]
-200
-100
0
100
200
x [AU]
-12.0
-12.5
-13.0
-13.5
log I_ν [erg/s/cm²/Hz/sr]

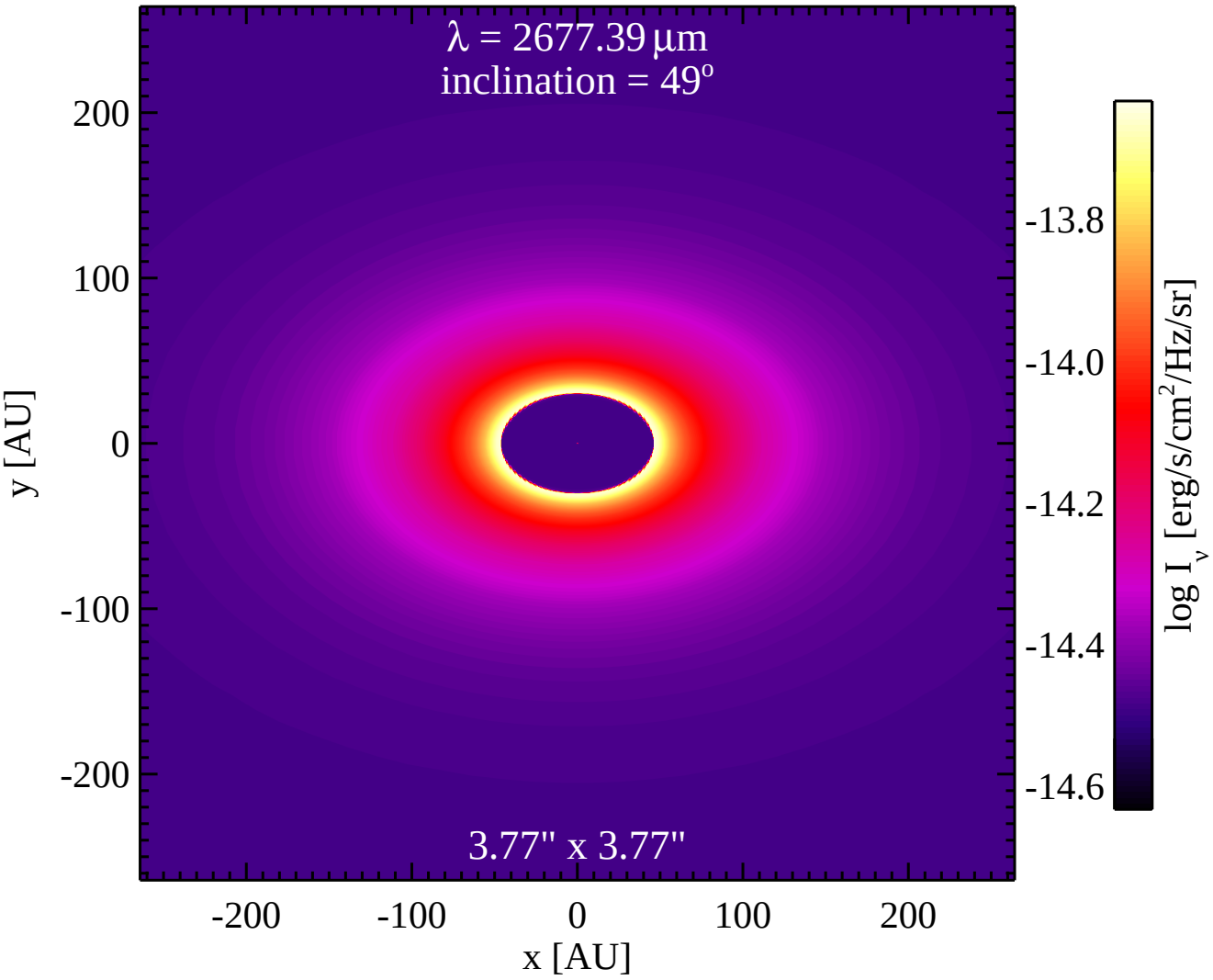

λ = 472.82 μm
inclination = 49°
3.20" x 3.20"
200
100
0
-100
-200
y [AU]
-200
-100
0
100
200
x [AU]
-12.0
-12.5
-13.0
-13.5
log I_ν [erg/s/cm²/Hz/sr]

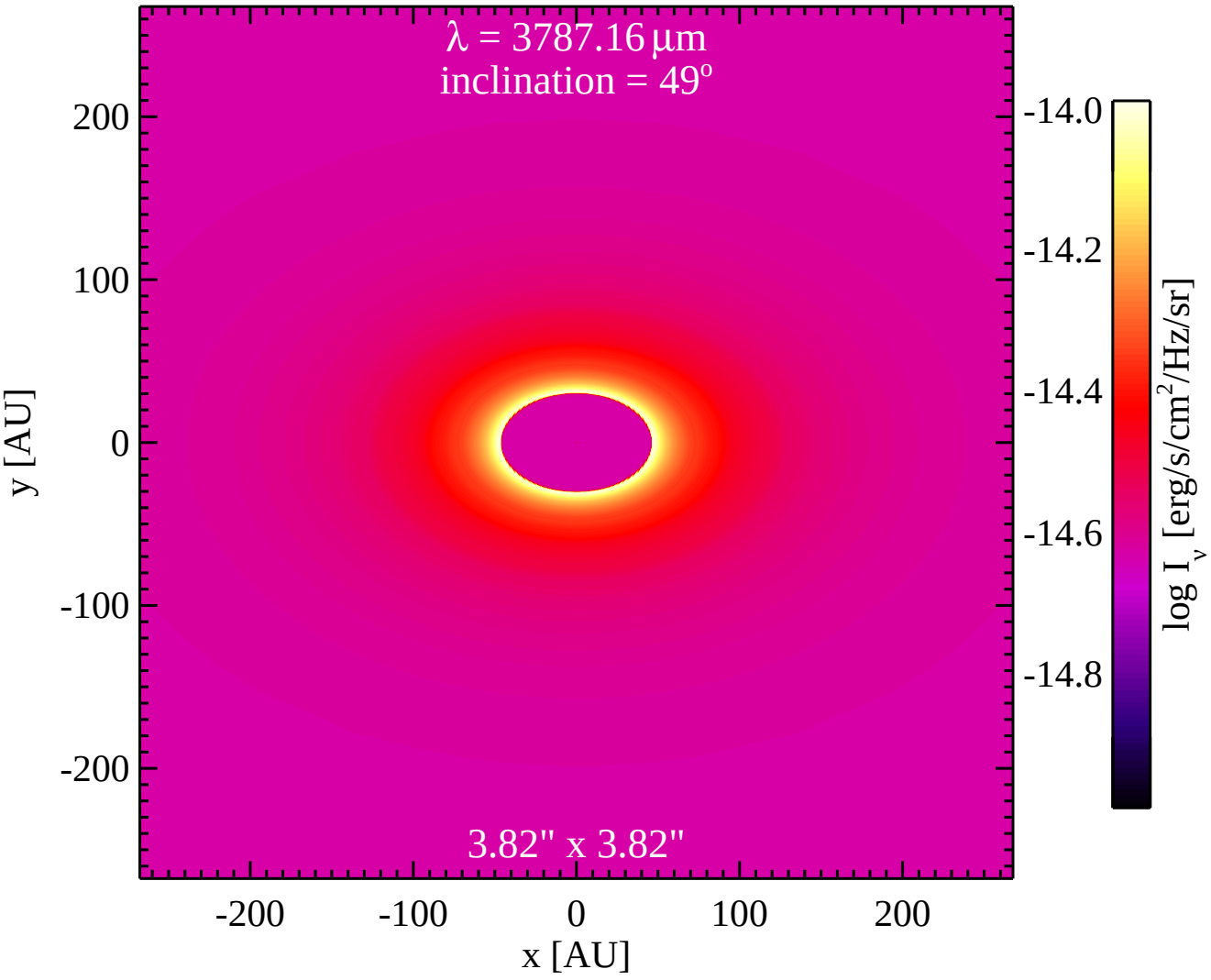

λ = 668.81 μm
inclination = 49°
3.39" x 3.39"
200
100
0
-100
-200
y [AU]
-200
-100
0
100
200
x [AU]
-12.5
-13.0
-13.5
-14.0
log I_ν [erg/s/cm²/Hz/sr]


λ = 946.03 μm
inclination = 49°
3.52" x 3.52"
200
100
0
-100
-200
y [AU]
-200
-100
0
100
200
x [AU]
-12.5
-13.0
-13.5
-14.0
log I_ν [erg/s/cm²/Hz/sr]


λ = 1338.15 μm
inclination = 49°
3.63" x 3.63"
200
100
0
-100
-200
y [AU]
-200
-100
0
100
200
x [AU]
-13.0
-13.2
-13.4
-13.6
-13.8
-14.0
-14.2
log I_ν [erg/s/cm²/Hz/sr]


λ = 1892.82 μm
inclination = 49°
3.73" x 3.73"
200
100
0
-100
-200
y [AU]
-200
-100
0
100
200
x [AU]
-13.4
-13.6
-13.8
-14.0
-14.2
log I_ν [erg/s/cm²/Hz/sr]


λ = 2677.39 μm
inclination = 49°
3.77" x 3.77"
200
100
0
-100
-200
y [AU]
-200
-100
0
100
200
x [AU]
-13.8
-14.0
-14.2
-14.4
-14.6
log I_ν [erg/s/cm²/Hz/sr]


λ = 3787.16 μm
inclination = 49°
3.82" x 3.82"
200
100
0
-100
-200
y [AU]
-200
-100
0
100
200
x [AU]
-14.0
-14.2
-14.4
-14.6
-14.8
log I_ν [erg/s/cm²/Hz/sr]